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NIST
PUBLICATIONS

NVLAP®

National
Voluntary
Laboratory
Accreditation
Program

1999
Directory

NIST Special Publication 810,
1999 edition

U.S. Department of Commerce
Technology Administration
National Institute of Standards
and Technology

QC
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.U57
NO.810
1999

UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899-0001

Dear Colleague:

NVLAP has made tremendous strides in achieving its goal to be recognized nationally and internationally as a "world-class" laboratory accreditation organization. After in-depth evaluations conducted of the NVLAP operations by representatives of the Asia Pacific Laboratory Accreditation Cooperation (APLAC), NVLAP signed the APLAC Mutual Recognition Arrangement (MRA) in Tokyo in November 1997. Other signatories to the MRA included accrediting bodies from Australia (NATA), New Zealand (IANZ), Hong Kong (HOKLAS), Singapore (SAC-SINGLAS), and Taiwan (CNLA). Since that time, NVLAP personnel have participated as members of multinational teams that have evaluated the accrediting bodies in Japan (JAB, JNLA) and Korea (KOLAS), and those bodies have since been added to the MRA. This has implications for reducing technical barriers to trade among the MRA partners since the signatories recognize the test reports and calibration certificates issued by their accredited laboratories as being technically equivalent.

NVLAP received the final assessment from the European Cooperation for Accreditation (EA) in September 1998. As of the publication of this Directory, we have responded to the EA evaluation report and are awaiting a favorable decision as to the admission of NVLAP to the EA recognition agreement. Like the APLAC MRA, the EA agreement will open up trade avenues and reduce technical barriers to trade by promoting the recognition and acceptance of accredited laboratories' certificates and reports.

NVLAP continues to work within the umbrella of the North American Free Trade Agreement (NAFTA) with Canada and Mexico to reach a point of mutual recognition between the calibration laboratory accreditation bodies in each country. This is being done under a Memorandum of Understanding between the national measurement laboratories and their closely affiliated calibration laboratory accreditation bodies, which established the North American Calibration Cooperation (NACC). NACC meets regularly to discuss recognition issues, to share quality documentation, and to plan cross-border interlaboratory comparisons (ILCs) involving samplings of calibration laboratories in each country. The first ILC in resistance is nearing completion with more planned this year in mass, length, temperature, and electrical measurements.

NVLAP is working towards continuous process improvement in the accreditation programs that it offers to its constituency of over eight hundred testing and calibration laboratories. We look forward to working with our old friends and new ones in the coming year. Please let us know how we are serving you. We factor all comments, good and bad, into our process in an attempt to maintain good customer relations and to improve our services wherever possible.

Sincerely,

James L. Cigler, Chief
Laboratory Accreditation Program

NIST

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1999 edition

National Voluntary Laboratory Accreditation Program

1999 Directory

Vanda R. White, Editor

March 1999

Supersedes SP 810, 1998 edition

U.S. Department of Commerce
William M. Daley, Secretary

Technology Administration
Gary R. Bachula, Acting Under Secretary for Technology

National Institute of Standards and Technology
Raymond G. Kammer, Director

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NVLAP AND THE NVLAP LOGO

The term NVLAP and the NVLAP logo are Federally registered trademarks of the National Institute of Standards and Technology and the Federal Government, who retain exclusive rights therein. Permission to use the term and/or the logo is granted to NVLAP-accredited laboratories for the limited purposes of announcing their accredited status, and for use on reports that describe only testing and calibration within the scope of accreditation. NIST reserves the right to control the quality of the use of the term NVLAP and of the logo itself.

INTRODUCTION

The laboratories listed in this Directory have been found to be competent to perform certain tests or calibrations as specified. These laboratories are allowed to use the NVLAP logo on their test or calibration certificates or reports, which implies that the processes used to achieve the tests or calibrations have been evaluated by NVLAP as being technically adequate when performed under the conditions specified in the laboratories' quality manuals and associated documentation. Further, NVLAP certifies that the laboratories have demonstrated traceability of their tests or calibrations to national standards at the appropriate levels of uncertainty for which the laboratories have been accredited.

As a prospective customer of the laboratories listed in this Directory, you should be aware that the laboratories are obligated to inform you, before the fact, whenever a test or a calibration service which you have requested is not covered by the NVLAP accreditation (NIST Handbook 150, Section 285.33(k)(8)). When contracting for the test or calibration service, you have the right to specify whether or not you desire a NVLAP-accredited test or calibration. Provision of a non-NVLAP-accredited test or calibration shall not be accompanied by the use of the NVLAP logo on the certificate or report, and NVLAP does not endorse any claims made regarding traceability and uncertainty of the measurements performed.

In addition, if a laboratory performs a combination of tests or calibrations, some of which have been accredited by NVLAP and some of which have not, the laboratory is bound by the provisions of NIST Handbook 150 to clearly identify the tests or calibrations covered by NVLAP accreditation and those not accredited by NVLAP on the test or calibration certificate or report.

Current information on the accreditation status of a laboratory can be obtained by contacting NVLAP as follows:

(1) Address: Chief, Laboratory Accreditation Program
National Institute of Standards and Technology
100 Bureau Drive, Stop 2140
Gaithersburg, MD 20899-2140;

(2) Phone: (301) 975-4016;

(3) Fax: (301) 926-2884; or

(4) E-mail: nvlap@nist.gov.

NVLAP also maintains a directory of accredited laboratories on the Internet, which is updated quarterly. The URL for NVLAP's home page is http://ts.nist.gov/nvlap.

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PROGRAM SUMMARY

The National Institute of Standards and Technology (NIST) administers the National Voluntary Laboratory Accreditation Program (NVLAP). NVLAP is comprised of a series of laboratory accreditation programs (LAPs) which are established on the basis of requests and demonstrated need. Each LAP includes specific calibration and/or test standards and related methods and protocols assembled to satisfy the unique needs for accreditation in a field of testing or calibration. NVLAP accredits public and private laboratories based on evaluation of their technical qualifications and competence to carry out specific calibrations or tests. Accreditation criteria are published in the Code of Federal Regulations (Title 15, Part 285) as a part of the NVLAP Procedures and General Requirements, and encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002. Accreditation is granted following successful completion of a process which includes submission of an application and payment of fees by the laboratory, an on-site assessment, resolution of any deficiencies identified during the on-site assessment, participation in proficiency testing, and technical evaluation. The accreditation is formalized through issuance of a Certificate of Accreditation and Scope of Accreditation (fig. 1) and publicized by announcement in various government and private media.

NVLAP accreditation is available to commercial laboratories; manufacturers' in-house laboratories; university laboratories; and federal, state, and local government laboratories. Foreign-based laboratories may also be accredited if they meet the same requirements as domestic laboratories and pay any additional fees required for travel expenses.

NVLAP provides an unbiased third party evaluation and recognition of performance, as well as expert technical guidance to upgrade laboratory performance. NVLAP accreditation signifies that a laboratory has demonstrated that it operates in accordance with NVLAP requirements in the following areas: accommodation and environment; calibration and test methods; certificates and reports; complaints; equipment and reference materials; handling of calibration and test items; measurement traceability and calibration; organization and management; outside support services and supplies; personnel; quality system, audit and review; records; and subcontracting. NVLAP accreditation does not imply any guarantee (certification) of laboratory performance or test/calibration data; it is solely a finding of laboratory competence. A laboratory may cite its accredited status and use the NVLAP logo on reports, stationery, and in business and trade publications provided that this use does not imply product certification.

This Directory of laboratories is published annually and lists the name, address, contact person, phone and fax numbers, e-mail and URL addresses (if available), accreditation renewal date, and scope of accreditation for each laboratory. An updated listing of laboratories is published quarterly on NVLAP's home page on the Internet: http://ts.nist.gov/nvlap.

Accreditation Renewal Date

A laboratory accreditation is valid for one year and commences on one of four dates: January 1, April 1, July 1, or October 1; an accreditation will terminate after one year unless renewed by the laboratory. Users of this Directory who are considering selection of accredited laboratories should be aware of the renewal date and verify that the laboratory has retained its accreditation at the time its services are to be provided. Verification of accreditation status can be obtained by contacting NVLAP.

On-Site Assessment

Before initial accreditation, an on-site assessment of each laboratory is conducted to determine compliance with the NVLAP criteria. After accreditation is granted, an on-site assessment must be conducted every two years in order for the laboratory to maintain accreditation. An assessment is conducted by one or more NVLAP assessors selected on the basis of their expertise in the field of testing or calibration to be reviewed. They may be engineers or scientists currently active in the field, consultants, college professors or retired persons. Their services are generally contracted as required.

Assessors use checklists provided by NVLAP so that each laboratory receives an assessment comparable to that received by others. However, assessors have some latitude to make judgments about a laboratory's compliance with the NVLAP criteria.

An assessment normally takes one to five days depending on the extent of the laboratory's application. Every effort is made to conduct an assessment with as little disruption as possible to the normal operations of the laboratory. During the assessment, the assessor carries out the following functions:

- meets with management and supervisory personnel responsible for the laboratory's activities to review the assessment process and to set the assessment agenda;

- examines the laboratory's quality assurance system, selects and traces the history of one or more samples from receipt to final issuance of reports, conducts a thorough review of the laboratory's quality manual, evaluates the training program, examines notebooks or records pertaining to the samples, checks sample identification and tracking procedures, determines whether the appropriate environmental conditions are maintained, and examines copies of completed reports;

- reviews records of periodic internal audits, use of check samples or participation in round-robin testing or other similar programs, personnel records including resumes and job descriptions of key personnel, competency evaluations for all staff members who routinely perform the testing or calibration for which accreditation is sought, calibration or verification records for apparatus used, reports, and sample control records;

- observes demonstrations of laboratory techniques and discusses them with the technical personnel to assure their understanding of the procedures; and

- examines major equipment, apparatus, and facilities.

At the conclusion of the assessment, the assessor will conduct an exit briefing to discuss observations and any deficiencies with responsible laboratory staff. A written assessment report will be left with the laboratory, and a copy forwarded to NVLAP.

If the on-site inspection reveals deficiencies that pertain to NVLAP requirements, the laboratory must respond in writing to NVLAP within 30 days of such notification. The response must provide documentation, signed by the Authorized Representative, that the specified deficiencies have either been corrected or include a plan of action to make corrections.

Monitoring Visits

Monitoring visits may be conducted at any time during the accreditation period for cause or on a random selection basis. These visits serve to verify reported changes in the laboratory's personnel, facilities, or operations, or to explore possible reasons for poor performance in proficiency testing. The scope of a monitoring visit may range from checking a few designated items to a complete review.

Proficiency Testing

Proficiency testing is an integral part of the NVLAP accreditation process. On-site demonstration of appropriate facilities, equipment, personnel, etc., is essential, but may not be sufficient for the continuing evaluation of laboratory competence. The production of test/calibration data using special proficiency testing samples or artifacts provides NVLAP with a means to determine the overall competence of the laboratory. Information obtained from proficiency testing helps to identify problems in a laboratory. When problems are found, NVLAP works with the laboratory staff to solve them.

Most fields of accreditation have proficiency testing requirements. Data submitted by the laboratories in response to specific NVLAP requirements are analyzed and reports of the results are made known to the participants. Summary results are available upon request to other interested parties; e.g., professional societies and standards writing bodies. The identity and performance of individual laboratories are kept confidential.

Satisfactory participation is based on specially tailored exercises designed to evaluate the ability of the laboratory to produce the services for which it is accredited. Some methods define pass/fail criteria; in other cases, individual laboratory results must fall within statistically acceptable limits of overall group performance. In a number of programs, NVLAP requires satisfactory participation in proficiency testing as a condition of initial, as well as continuing, accreditation.

Technical Evaluation

A final technical evaluation is performed by a NVLAP review panel. The panel's recommendations regarding accreditation are based on:

- information provided on the application;
- results of quality system documentation review;
- on-site assessment reports;
- actions taken by the laboratory to correct deficiencies;
- results of proficiency testing; and
- information from any monitoring visits of the laboratory.

If the technical evaluation reveals additional deficiencies, written notification of the deficiencies will be sent to the laboratory. The laboratory must respond as specified in the previous section, *On-Site Assessment*. Clarification of some issues may be requested by telephone. All deficiencies must be resolved before accreditation can be granted.

Accreditation Actions

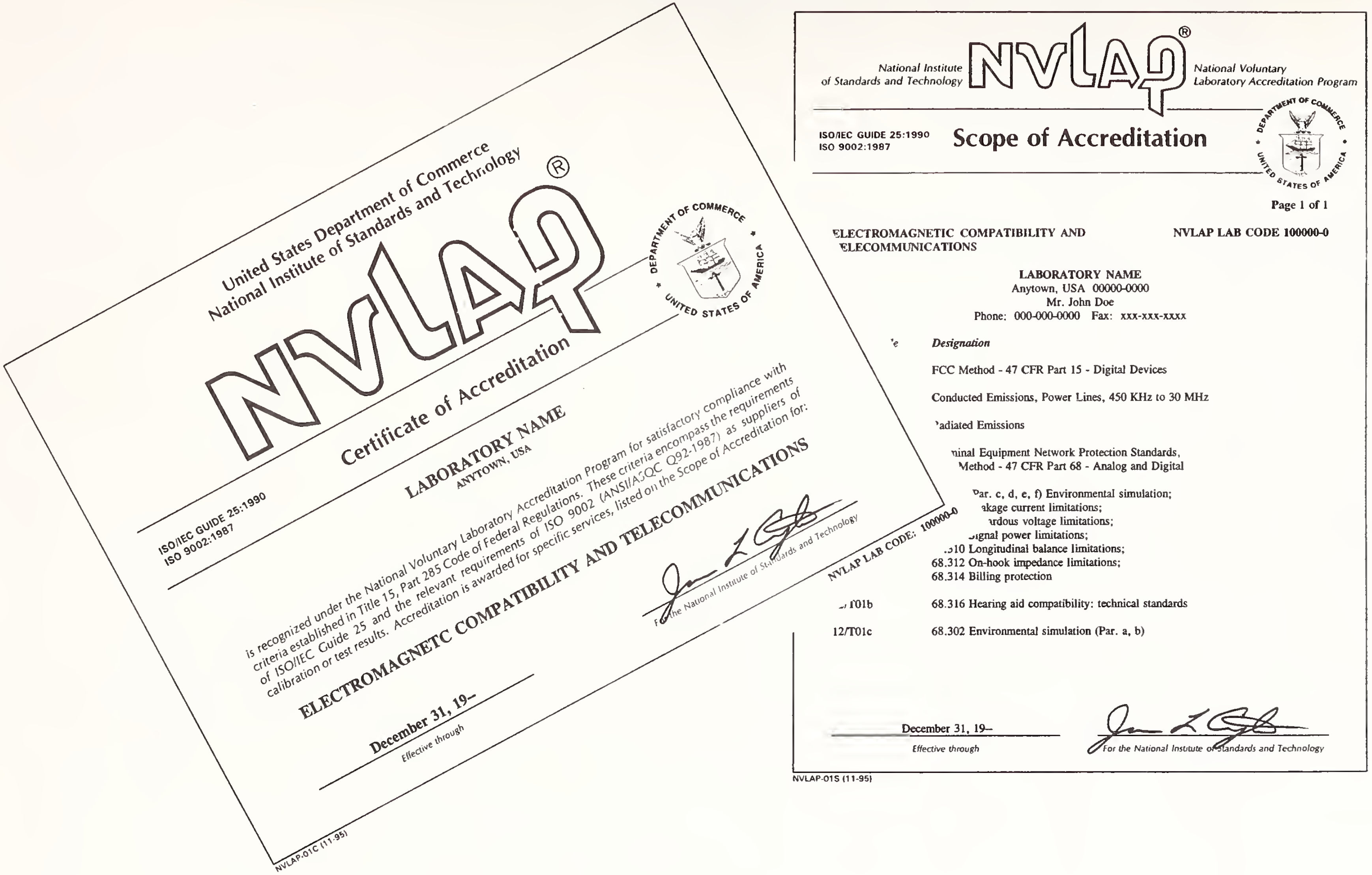
After the technical evaluation has been completed and all financial and administrative requirements have been satisfied, NVLAP takes one of the following accreditation actions:

Accreditation	The laboratory is issued a Certificate of Accreditation and a Scope of Accreditation.
Denial	The laboratory is notified of a proposal to deny accreditation and the reason(s).

If an accredited laboratory is found to be out of compliance with the NVLAP criteria, NVLAP may take one of the following actions:

Suspension	Suspension is a temporary removal of the accredited status of a laboratory when it is found to be out of compliance with the terms of its accreditation. The laboratory will be notified of the reasons for and conditions of the suspension and the action(s) that the laboratory must take to have the accreditation reinstated. Reasons for suspension include: loss of key personnel, loss of major equipment, damage to laboratory by fire, changing laboratory location, proficiency test failure.
Revocation	Revocation is the removal of the accredited status of a laboratory when it is found to have violated the terms of its accreditation. The laboratory will be notified of the reasons for proposed revocation and the procedure for appealing such a decision. If accreditation is revoked, the laboratory may be given the option of voluntarily terminating the accreditation. A laboratory whose accreditation has been revoked must return its Certificate of Accreditation and cease use of the NVLAP logo on any of its reports, correspondence, or advertising. Reasons for revocation include: obtaining accreditation through fraud, refusal to resolve deficiencies, no longer providing the type of calibration or testing service for which accreditation was issued.

If denial or revocation has been proposed, the laboratory may appeal the decision to the Director of NIST. If an appeal is not requested, the action becomes final upon the expiration of the 30-day period following receipt of the notification.



United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation

LABORATORY NAME
ANYTOWN, USA

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

ELECTROMAGNETC COMPATIBILITY AND TELECOMMUNICATIONS

December 31, 19–
Effective through

For the National Institute of Standards and Technology

NVLAP LAB CODE: 100000-0

NVLAP-01C (11-95)

National Institute of Standards and Technology

NVLAP®

National Voluntary Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Scope of Accreditation

Page 1 of 1

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

NVLAP LAB CODE 100000-0

LABORATORY NAME
Anytown, USA 00000-0000
Mr. John Doe
Phone: 000-000-0000 Fax: xxx-xxx-xxxx

Designation

FCC Method - 47 CFR Part 15 - Digital Devices

Conducted Emissions, Power Lines, 450 KHz to 30 MHz

adiated Emissions

inal Equipment Network Protection Standards,
Method - 47 CFR Part 68 - Analog and Digital

Par. c, d, e, f) Environmental simulation;
akage current limitations;
ardous voltage limitations;
ignal power limitations;
.310 Longitudinal balance limitations;
68.312 On-hook impedance limitations;
68.314 Billing protection

/T01b 68.316 Hearing aid compatibility: technical standards

12/T01c 68.302 Environmental simulation (Par. a, b)

December 31, 19–
Effective through

For the National Institute of Standards and Technology

NVLAP-01S (11-95)

Figure 1. NVLAP Certificate and Scope of Accreditation (sample)

LABORATORY ACCREDITATION SUMMARY

The following table summarizes laboratory accreditations by field of testing or calibration as of the date this Directory was prepared for publication. Since some laboratories are accredited in more than one field, the total number of laboratories listed by field of accreditation (see Index B) is greater than the number of laboratories in the system (see Index A).

PROGRAM GROUP/Field of Accreditation		*Number of Accreditations*
CALIBRATION LABORATORIES GROUP		
Dimensional		10
Electromagnetics - DC/Low Frequency		8
Electromagnetics - RF/Microwave		4
Ionizing Radiation		5
Mechanical		10
Optical Radiation		1
Thermodynamics		7
Time and Frequency		7
COMPUTER/ELECTRONICS GROUP		
Cryptographic Modules Testing		3
Federal Communications Commission (FCC) Methods		155
GOSIP		2
MIL-STD-462 Test Methods		16
DOSIMETRY GROUP/Ionizing Radiation Dosimetry		44
ENVIRONMENTAL GROUP/Asbestos Fiber Analysis:	PLM test method	311
	TEM test method	81
FASTENERS AND METALS GROUP		90
PRODUCT TESTING GROUP		
Acoustical Testing Services		20
Carpet and Carpet Cushion		13
Commercial Products Testing (Paints, Paper, Plastics, Plumbing, Roofing, Seals/Sealants)		7
Construction Materials Testing		16
Efficiency of Electric Motors		7
Energy Efficient Lighting Products		10
Thermal Insulation Materials		18
Wood Based Products		5
TOTAL ACCREDITATIONS		850

HOW TO USE THIS DIRECTORY

The *1999 Directory* lists laboratories accredited by NVLAP. It consists of five indexes which are cross-referenced by NVLAP Lab Code, a unique identifier assigned to each laboratory; e.g., 100000-0. The Directory enables the user to locate name, address, telephone and accreditation information about laboratories of interest. The user should contact the laboratories directly to get information beyond that provided here.

INDEX A, LISTING BY LABORATORY NAME, lists all laboratories in alphabetical order by laboratory name. The name of each laboratory is listed as it appears on its application for accreditation.

INDEX B, LISTING BY FIELD OF ACCREDITATION, lists all laboratories in alphabetical order by laboratory name within field of accreditation. The index is organized by PROGRAM GROUPS, which are groups of Laboratory Accreditation Programs (LAPs) assembled in categories of technical fields for efficiency in management (see page 6). Listed under each PROGRAM GROUP are the technical fields of accreditation managed within that GROUP. Laboratories accredited in more than one field will have more than one listing in this index.

INDEX C, LISTING BY STATE/COUNTRY, lists all laboratories in alphabetical order by laboratory name within state. The states are designated by the standard two-letter postal abbreviations. Laboratories located outside of the United States are listed at the end of the index. Index C also indicates the field of accreditation for each laboratory.

INDEX D, LISTING OF TESTING LABORATORIES BY NVLAP LAB CODE, lists all testing laboratories in numerical order by NVLAP Lab Code. There is only one listing per Lab Code in Index D.

INDEX E, LISTING OF CALIBRATION LABORATORIES BY NVLAP LAB CODE, lists all calibration laboratories in numerical order by NVLAP Lab Code. There is only one listing per Lab Code in Index E.

INFORMATION CONTAINED IN INDEXES D AND E

Each laboratory receives a Certificate of Accreditation and a Scope of Accreditation when accreditation is granted or renewed. The Scope of Accreditation details the methods and services for which accreditation has been granted to a laboratory. Indexes D and E present a condensation of the Scope(s) of Accreditation for testing and calibration laboratories, respectively.

The following information is presented for each laboratory listed in Index D or Index E:

(a) NVLAP Lab Code;
(b) Laboratory name and address;
(c) Authorized representative (contact);
(d) Phone number;
(e) Fax number;
(f) E-mail address (if available);
(g) URL (web site) address (if available);
(h) Field of accreditation;
(i) Accreditation expiration date; and
(j) Scope of accreditation.

HOW TO LOCATE SPECIFIC INFORMATION

For a laboratory whose name is known

Refer to Index A and note the laboratory's NVLAP Lab Code. Look up the Lab Code in Index D (if testing) or Index E (if calibration) to obtain specific information about the laboratory; e.g., address, phone number, Scope of Accreditation, etc.

For a laboratory in a particular geographic area

Determine the states (or country) included in the geographic area of interest. Refer to Index C to obtain the NVLAP Lab Code of a laboratory within the selected geographic area for a given field of accreditation. Look up the Lab Code in Index D (if testing) or Index E (if calibration) to obtain specific information about the laboratory; e.g., address, phone number, Scope of Accreditation, etc.

For a laboratory in a particular field of accreditation

Choose the field of accreditation from the list on page 6. Refer to Index B and note the name and Lab Code of each laboratory of interest. Index B is organized by field of accreditation within major program group. Look up the Lab Code in Index D (if testing) or Index E (if calibration) to obtain specific information about the laboratory; e.g., address, phone number, Scope of Accreditation, etc.

SPECIAL NOTE ABOUT LABORATORIES ACCREDITED IN ASBESTOS FIBER ANALYSIS

The test method designations for Bulk Asbestos Analysis (PLM) and Airborne Asbestos Analysis (TEM) are as follows:

NVLAP Code	*Program Title/Test Method Designation*
18/A01	BULK ASBESTOS ANALYSIS (PLM)
	U.S. Environmental Protection Agency (EPA) "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" as found in 40 Code of Federal Regulations (CFR), Part 763, Subpart F, Appendix A, or the current U.S. EPA method for the analysis of asbestos in building material.
18/A02	AIRBORNE ASBESTOS ANALYSIS (TEM)
	U.S. Environmental Protection Agency (EPA) "Interim Transmission Electron Microscopy Analytical Methods—Mandatory and Nonmandatory—and Mandatory Section to Determine Completion of Response Actions" as found in 40 Code of Federal Regulations (CFR), Part 763, Subpart E, Appendix A.

TABLE

A

LISTING OF
LABORATORY
DATA

INDEX A. LISTING BY LABORATORY NAME

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
3			
3M Product Safety EMC Laboratory	200033-0	St. Paul	MN
3V Fasteners Co. Inc. Testing Laboratory	200264-0	Corona	CA
A			
A & B Environmental Services, Inc.	101793-0	Houston	TX
A T Labs	101062-0	Youngstown	OH
A-Pex International Co., Ltd. Yokowa Laboratory	200109-0	Mie-ken	JAPAN
A.E.S.L.	200303-0	Tempe	AZ
A.R.C. Laboratories, Inc.	101832-0	Grand Forks	ND
AAC Trinity, Inc.	101168-0	Farmington Hills	MI
ABM Environmental Consultants, Inc.	102015-0	Long Island City	NY
Accredited Environmental Technologies, Inc.	101051-0	Media	PA
Accredited Environmental Technologies, Inc.	200236-0	Leland	NC
ACM Environmental, Inc.	101977-0	South Bend	IN
Acominas - Analysis and Testing Laboratory	200185-0	Ouro Branco MG	BRAZIL
Acoustic Systems Acoustical Research Facility	100286-0	Austin	TX
Acton Environmental Testing, dba National Technical Systems	100347-0	Boxborough	MA
Advance Data Technology Corporation	200102-0	Taipei Hsien	TAIWAN
Advanced Energy, Industrial Energy Laboratory	200081-0	Raleigh	NC
Advanced Industrial Hygiene Services, Inc.	101006-0	Miami	FL
Aearo Company, E·A·RCAL Acoustical Laboratory	100374-0	Indianapolis	IN
Aerospace NYLOK - a subsidiary of the NYLOK Fastener Corporation	200271-0	Hawthorne	NJ
Aerospace Rivet Manufacturers Corp.	200266-0	Santa Fe Springs	CA
AGRA Earth and Environmental, Inc. - Env. Chemistry Laboratory	200357-0	Portland	OR
AGX, Inc.	101578-0	Cranberry Township	PA
AHD	200129-0	Dowagiac	MI
Aires Consulting Group, Inc.	101014-0	Batavia	IL
AIResearch, Inc.	101868-0	Wauwatosa	WI
Airtek Environmental Corp.	102011-0	New York	NY
Akzo Kashima Ltd. Kakegawa EMC Test Site	100290-2	Shizuoka	JAPAN
Akzo Kashima Ltd., Kashima EMC Site	100290-0	Ibaraki	JAPAN
Akzo Kashima Ltd., Kawasaki Technical Center	200300-0	Kawasaki	JAPAN
Akzo Kashima Ltd., Matsuda EMC Test Site	100290-4	Kanagawa	JAPAN
Akzo Kashima Ltd., Nagano EMC Test Site	100290-3	Nagano	JAPAN
Akzo Kashima Ltd., Tochigi EMC Test Site	100290-5	Tochigi	JAPAN
ALAC	200323-0	Bronx	NY
Allegheny Asbestos Analysis	101704-0	Carnegie	PA
AlliedSignal FM&T Metrology	200108-0	Kansas City	MO
Alloy & Stainless Testing	200353-0	Virginia Beach	VA
Alpine Consulting, Inc.	102089-0	Colorado Springs	CO
AMA Analytical Services, Inc.	101143-0	Lanham	MD
Ambient Labs, Inc.	101618-0	New York	NY
American Asbestos Laboratories, Inc.	101775-0	Miami	FL
American Carpet Laboratories, Inc.	100139-0	Ringgold	GA
American Electric Power, Environmental	102102-0	Columbus	OH

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Laboratory			
American Medical Laboratories, Inc.	101136-0	Chantilly	VA
American Testing Laboratories, Inc.	100146-0	Lancaster	PA
Analab, LLC	200260-0	Sterling	PA
Analytica Solutions, Inc.	101086-0	Broomfield	CO
Analytical Environmental Services International, Inc.	200051-0	Hato Rey	PR
Analytical Environmental Services, Inc.	102033-0	Atlanta	GA
Analytical Industries, Inc.	101855-0	Paducah	KY
Analytical Labs San Francisco, Inc.	101909-0	San Francisco	CA
Analyticalab	101727-0	Willow Springs	IL
Aoyama Fastener Laboratory	200213-0	Niwa-gun, Aichi Prefecture	JAPAN
APA - The Engineered Wood Association Research Center	100423-0	Tacoma	WA
Apex Research Laboratory	102118-0	Whitmore Lake	MI
Apollo Environmental, Inc.	101871-0	Gibsonton	FL
Apple Computer, Inc., EMC Compliance Laboratory	200071-0	Cupertino	CA
Applied Environmental, Inc.	101611-0	Reston	VA
Architectural Testing Inc.	200361-0	York	PA
Arden Fasteners	200187-0	Addison	IL
Arizona Public Service Co., Palo Verde Nuclear Generating Station	100536-0	Tonopah	AZ
Armstrong Acoustic Labs, Armstrong World Ind., Inc. Innov. Center	100228-0	Lancaster	PA
Asakawa Screw Co., Ltd.	200197-0	Yokohama	JAPAN
Asakawa Screw Co., Ltd. Kawawa Factory	200257-0	Yokohama	JAPAN
ASBESTECH	101442-0	Carmichael	CA
Asbestos Analysis and Information Service, Inc.	101261-0	Four Oaks	NC
Asbestos Analytical	101771-0	Tucson	AZ
Asbestos Consulting & Testing (ACT)	101649-0	Lenexa	KS
Asbestos TEM Laboratories, Inc.	101891-0	Berkeley	CA
Asbestos TEM Laboratories, Inc.	200104-0	Sparks	NV
ASC geoscience, inc.	200316-0	Lakeland	FL
Assaigai Analytical Laboratories, Inc.	101457-0	Albuquerque	NM
AST Research, Inc. EMC Lab.	200135-0	Irvine	CA
ATC Associates Inc.	102071-0	Cincinnati	OH
ATC Associates Inc.	200250-0	Columbia	MD
ATC Associates Inc.	200290-0	Dallas	TX
ATC Associates, Inc.	101187-0	New York	NY
ATC Environmental, Inc.	102031-0	Englewood	CO
Athenica Environmental Services, Inc.	101958-0	Long Island City	NY
Atomic Energy Industrial Laboratory of the Southwest, Inc.	100556-0	Houston	TX
Aurora Consolidated Laboratories	101661-0	West Allis	WI
Austin Analytical Laboratory	200014-0	Austin	TX

B

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Baltimore Gas & Electric Company	100501-0	Lusby	MD
BarTech Inc. - Chemical Laboratory	200148-0	Johnstown	PA
Batta Laboratories, Inc.	101032-0	Newark	DE
Battelle - Pacific Northwest National Laboratory	200216-0	Richland	WA
Bay Area Air Quality Management District	102090-0	San Francisco	CA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Bay Area Compliance Laboratory, Corp.	200167-0	Sunnyvale	CA
BCAG Fastener Quality Test Lab Everett Site	200292-0	Seattle	WA
Beaulieu of America - Carpet Testing Lab	100190-0	Dalton	GA
Belgo-Mineira Chemical Laboratory	200196-0	35.930-900 Joao Monlevade	BRAZIL
Beling Consultants, Inc.	101356-0	Moline	IL
Bell Laboratories, Division Lucent Technologies, Inc.	101965-0	Murray Hill	NJ
Bentley Testing Laboratory	100288-0	City of Industry	CA
Binder Metal Products, Inc.	200321-0	Gardena	CA
Bodycote Industrial Testing, Inc.	101072-0	St. Louis	MO
Braun Intertec Corporation	101234-0	Minneapolis	MN
C			
Cabletron Systems, Inc.	200121-0	Rochester	NH
California Screw Products	200183-0	Paramount	CA
CAM Environmental Services, Inc.	200240-0	Pasadena	TX
CAMCO Lab	101803-0	Fontana	CA
Canadian Standards Association	100322-0	Etobicoke Ontario	CANADA
Cape Environmental Management, Inc.	102111-0	Atlanta	GA
Carnow, Conibear & Associates Ltd.	101039-0	Chicago	IL
Carolina Environmental, Inc.	101768-0	Cary	NC
Carolina Power & Light Company, Harris Energy & Enviro. Center	100517-0	New Hill	NC
Casey Products, Inc.	200278-0	Lisle	IL
CBS Fasteners, Inc.	200253-0	Anaheim	CA
CDRH X-Ray Calibration Laboratory	105018-0	Rockville	MD
Celestica International Inc.	200055-0	North York, Ontario	CANADA
Celotex Technical Center	100417-0	St. Petersburg	FL
Chatfield Technical Consulting Limited	101103-0	Mississauga Ontario	CANADA
Chemitox EMC Research, Inc.	200120-0	Yamanashi-ken	JAPAN
ChemScope, Inc.	101061-0	North Haven	CT
CHEMTEX Environmental Laboratory, Inc.	200025-0	Port Arthur	TX
Chomerics Test Services (CTS)	100296-0	Woburn	MA
Chopra-Lee, Inc.	200095-0	Grand Island	NY
Cisco Systems, Inc.	200114-0	San Jose	CA
City of Los Angeles Department of Water and Power	101111-0	Los Angeles	CA
City of San Jose, Materials Testing Laboratory	100325-0	San Jose	CA
Clark Seif Clark, Inc.	200324-0	Chatsworth	CA
Clayton Environmental Consultants	101106-0	Seattle	WA
Clayton Laboratory Services	101125-0	Kennesaw	GA
Clinton Power Station	100570-0	Clinton	IL
Combustion Engineering, Inc.	100563-0	Windsor	CT
ComEd - TLD Processing Lab - CTEAM Facility	100541-0	Bolingbrook	IL
Commercial Testing Company	100120-0	Dalton	GA
Communication Certification Laboratory	100272-0	Salt Lake City	UT
Compaq Computer Corp. EMC Test Facility	200078-0	Colorado Springs	CO
Compaq Computer Corp. Emissions Control Lab	200058-0	Houston	TX
Compaq Corporate Metrology	200154-0	Houston	TX
Compatible Electronics, Inc.	200063-0	Agoura	CA
Compliance Eng. Svces, Inc., Compliance Certification Services	200065-0	Sunnyvale	CA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Compliance Engineering Services, Inc. - Taiwan	200064-0	Sunnyvale	CA
Compliance Test Laboratories, Inc.	200237-0	Liberty	SC
Composite Panel Association (CPA)	100418-0	Gaithersburg	MD
Comprehensive Health Services-Environmental Health PLM Laboratory	101759-0	Kennedy Space Center	FL
Con Edison - ChemLab	101558-0	Long Island City	NY
Con Edison, Indian Point	100538-0	Buchanan	NY
Concord Analysis, Inc.	101884-0	Chatsworth	CA
Continental Envirotech, Inc.	200080-0	Mesa	AZ
Control Data Accredited OSI Test Center	100354-0	Arden Hills	MN
Converse Consultants MR, Inc.	102091-0	Reno	NV
Cooper Lighting - Metalux Research Laboratories	200050-0	Americus	GA
Cosmos Corporation	200151-0	Watarai-gun Mie	JAPAN
Covino Environmental Associates, Inc.	101781-0	Woburn	MA
Craig Environmental Services, Inc.	200289-0	Mays Landing	NJ
Crisp Analytical Laboratory	200349-0	Carrollton	TX
Criterion Laboratories, Inc.	102046-0	Bensalem	PA
Criterion Technology	100396-0	Rollinsville	CO
Cryptographic Equipment Assessment Lab. (CEAL)	200002-0	McLean	VA
CT&E Environmental Services Inc.	200067-0	San Diego	CA
CTL Environmental Services	101216-0	Harbor City	CA
Curtis-Straus LLC	200057-0	Littleton	MA

D

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
D.L.S. Electronic Systems, Inc.	100276-0	Wheeling	IL
D/L Laboratories	100252-0	New York	NY
Dames & Moore, Inc.	101433-0	Salem	NH
Data General Corporation	100339-0	Westboro	MA
DataChem Laboratories	101917-0	Cincinnati	OH
Davis & Floyd, Inc.	101410-0	Greenwood	SC
Daybrite Lighting (Genlyte Thomas Group) Photometric Laboratory	200016-0	Tupelo	MS
DCM Science Laboratory, Inc.	101258-0	Wheat Ridge	CO
Dell Regulatory Test Laboratories	200052-0	Round Rock	TX
Denver Instrument Co. Weight Lab	200106-0	Arvada	CO
Department of Environmental Health Industrial Hygiene Laboratory	101530-0	San Diego	CA
Design for Health, Inc.	101864-0	San Diego	CA
Detroit Edison, Fermi 2 Dosimetry Laboratory	100529-0	Newport	MI
Dexter Fastener Technologies, Inc.	200144-0	Dexter	MI
DHMH-Air Quality Laboratory	101523-0	Baltimore	MD
Digital Regulatory Engineering and Testing Services	100413-0	Marlboro	MA
Diviersified T.E.S.T. Technologies, Inc.	200340-0	Groton	NY
Dixon Information Inc.	101012-0	South Salt Lake	UT
DLZ Laboratories, Inc.	101060-0	Columbus	OH
Dodge-Regupol, Inc. Laboratory	200030-0	Lancaster	PA
Dolphin Environmental Consultants	102086-0	Stafford	TX
DOMUS ITSL, a division of LGS Group, Incorporated	200017-0	Ottawa Ontario	CANADA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Dove Environmental Corporation	102053-0	Miami	FL
Dow Chemical N. America Foam Products Research, Prod. Perf. Lab.	100103-0	Midland	MI
Duke Engineering and Services Environmental Laboratory	100524-0	Bolton	MA
Duke Power Company Dosimetry Laboratory	100505-0	Charlotte	NC
Duquesne Light Company, Beaver Valley Power Station	100521-0	Shippingport	PA
Durkee Testing Laboratories, Inc.	200178-0	Paramount	CA
Duro-Test Corporation	200283-0	Clifton	NJ
E			
E. M. Analytical, Inc.	101902-0	Dania	FL
EA Group	101019-0	Mentor	OH
EAI, Inc.	102114-0	Jersey City	NJ
Eastern Analytical Services, Inc.	101646-0	Elmsford	NY
Eastern Materials Testing Lab a division of Jaworski Geotech	100315-0	New Britain	CT
Eastman Kodak Co.-Regulatory Compliance Center-EMC Facility	200313-0	Rochester	NY
Eaton E3 Laboratory	100382-0	Southfield	MI
Eberline Dosimetry Service	100515-0	Albuquerque	NM
EcoSystems Environmental, Inc.	101162-0	Carrollton	TX
ECS/Wagner Environmental	101064-0	Eugene	OR
EEC, Inc.	101088-0	Raleigh	NC
Electric Boat Corp/A General Dynamics Co. Radiological Ctrl. Dept	100560-0	Groton	CT
Electro Magnetic Test, Inc.	200147-0	Mountain View	CA
Electro. Meas. Off., Yokohama Res. & Dev. Ctr. Murata Mfg. Co.	200263-0	Kanagawa	JAPAN
Electronic Compliance Laboratories, Inc.	200089-0	Sunnyvale	CA
Electronic Research & Service Organization/ITRI	200118-0	Hsinchu	TAIWAN
Electronics Test Centre	200282-0	Kanata, Ont.	CANADA
Electronics Testing Center, Taiwan	200133-0	Taoyuan Hsien	TAIWAN
Elite Electronic Engineering Company	100278-0	Downers Grove	IL
Elliott Laboratories, Inc.	200069-0	Sunnyvale	CA
EMC Compliance Mgmt Group, dba Turntech Scientific & Instr., Inc.	200068-0	Mountain View	CA
EMC International, Inc.	200094-0	Youngsville	NC
EMC Kashima Corporation	200070-0	Chiba-ken	JAPAN
EMCE Engineering, Inc.	200092-0	Fremont	CA
EMS Laboratories, Inc.	101218-0	Pasadena	CA
EMSL Analytical Mobile Laboratory	200344-0	Chicago	IL
EMSL Analytical, Inc.	101048-0	Westmont	NJ
EMSL Analytical, Inc.	101048-1	Atlanta	GA
EMSL Analytical, Inc.	101048-2	Piscataway	NJ
EMSL Analytical, Inc.	101048-3	San Mateo	CA
EMSL Analytical, Inc.	101048-4	Ann Arbor	MI
EMSL Analytical, Inc.	101048-9	New York	NY
EMSL Analytical, Inc.	101048-10	Carle Place	NY
EMSL Analytical, Inc.	101277-0	Fairfax	VA
EMSL Analytical, Inc.	102104-0	Greensboro	NC
EMSL Analytical, Inc.	102105-0	Warwick	RI
EMSL Analytical, Inc.	102106-0	Houston	TX

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
EMSL Analytical, Inc.	200019-0	Seattle	WA
EMSL Analytical, Inc.	200034-0	Dallas	TX
EMSL Analytical, Inc.	200056-0	Williamsville	NY
EMSL Analytical, Inc.	200188-0	Indianapolis	IN
EMSL Analytical, Inc.	200204-0	N. Miami Beach	FL
EMSL Analytical, Inc.	200247-0	Charlotte	NC
EMSL Analytical, Inc.	200293-0	Beltsville	MD
EMSL Analytical, Inc.	200310-0	Carlstadt	NJ
EMSL Analytical, Inc.	200333-0	Elmsford	NY
EMSL Analytical, Inc.	200375-0	Baton Rouge	LA
ENCORP	200013-0	El Segundo	CA
Entergy Operations, Inc.	100535-0	Taft	LA
Enviro Techniques, Inc.	200024-0	Paterson	NJ
Enviro-Probe, Inc.	101222-0	Bronx	NY
EnviroHealth Technologies, Inc.	200374-0	St. Louis	MO
EnviroMed Services, Inc.	101514-0	New Haven	CT
Environmental Enterprise Group(EEG), Inc.	101587-0	Russellville	AR
Environmental Hazards Services, L.L.C.	101882-0	Richmond	VA
Environmental Health Laboratories	101506-0	Clayton	MO
Environmental Management Consultants, Inc.	101926-0	Scottsdale	AZ
Environmental Monitoring & Consulting Associates	101087-0	Somerville	NJ
Environmental Services International, Inc.	101306-0	St. Albans	WV
Environmental Testing and Monitoring Services, Inc.	200131-0	Virginia Beach	VA
Environmental Testing Laboratories, Inc.	101937-0	Farmingdale	NY
Environmental Testing, Inc.	101848-0	Middletown	DE
EnvironMETeo Services Inc.	101807-0	Waipahu	HI
Envirotest, Inc.	101595-0	Houston	TX
ERI Consulting Engineers, Inc.	101232-0	Tyler	TX
ERT Testing Services	101295-0	Highland Park	MI
ESG Laboratories	102029-0	Indianapolis	IN
EssTek Ohio, Inc.	102093-0	Middleburg Heights	OH

F

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Fabristeel Products Inc.	200329-0	Taylor	MI
Fairfield Testing Laboratory, Inc.	100317-0	Stamford	CT
Fairway Testing Company, Inc.	100340-0	Stony Point	NY
Fastener Innovation Technology, Inc.	200179-0	Gardena	CA
Federal Manufacturing Corp.	200279-0	Chatsworth	CA
Fiberquant, Inc.	101031-0	Phoenix	AZ
Fibertec, Inc.	101510-0	Holt	MI
Flexible Products Company	100210-0	Joliet	IL
Florida Power & Light Company	100544-0	Juno Beach	FL
Fluke Corporation Primary Standards Laboratory	105016-0	Everett	WA
Fluor Daniel Fernald, Inc., Analytical Laboratory Services	102010-0	Cincinnati	OH
Fong Prean Industrial Co., Ltd.	200288-0	Kaohsiung Hsien	TAIWAN
Forensic Analytical Specialties, Inc.	101459-0	Hayward	CA
Forensic Analytical Specialties, Inc.	101459-1	Rancho Domingues	CA
Fountain Compliance Laboratory	200101-0	Somerset	NJ
Froehling & Robertson, Inc.	102060-0	Richmond	VA
FRS Geotech, Inc.	102078-0	Denver	CO
Fuji Buhin Kogyo Kabushiki Kaisha	200203-0	Ohta Gunma	JAPAN
Fuji Component Parts USA, Inc.	200180-0	Indianapolis	IN

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Fujitsu Evaluation Engineering Laboratory	200281-0	Numazu, Shizuoka-Pref.	JAPAN
Fujitsu General EMC Laboratory	200373-0	Kawasaki	JAPAN
Fuserashi Gunma	200173-0	Gunma-Ken	JAPAN
Fwu Kuang Enterprises Co., Ltd.	200286-0	Tainan Hsien	TAIWAN

G

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
GA Environmental Services, Inc.	101996-0	Eddystone	PA
Galson Laboratories	101375-0	East Syracuse	NY
Garwood Laboratories, Inc.	200119-0	Placentia	CA
GE Industrial Systems, Renewal Services - TEMS	200029-0	Rome	NY
GE Lighting- Engineering Support - NA	100398-0	Cleveland	OH
GE Owensboro Test Laboratory	200305-0	Owensboro	KY
GEC Marconi Avionics Ltd Environmental and EMC Test Center	200304-0	Kent	UNITED KINGDOM
Gelles Laboratories, Inc.	101170-0	Columbus	OH
Geo-Analytical Services, Inc.	102082-0	Atlanta	GA
Georgia Power Company/Enviro. Affairs, Enviro. Lab-Dosimetry	100551-0	Smyrna	GA
Geoscience Ltd.	100142-0	San Diego	CA
Ginna Nuclear Station	100514-0	Ontario	NY
GLE Associates, Inc.	102003-0	Tampa	FL
Global EMC Standard Tech. Corp.	200085-0	Taipei County	TAIWAN
GPU Nuclear Chemistry/Materials Labs.	102064-0	Reading	PA
GPU Nuclear Corp.	100510-0	Middletown	PA
Guardian Laboratories	101399-0	Louisville	KY

H

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Hadd-Co Inspection Lab	200326-0	Torrance	CA
Hayes Microcomputer Products, Inc.	200103-0	Atlanta	GA
Health Science Associates	101384-0	Los Alamitos	CA
Henderson/Longfellow Associates, Inc.	102077-0	St. Petersburg	FL
Henry Troemner, Inc.	105013-0	Philadelphia	PA
Hewlett Packard, Product Test Lab, San Diego	200138-0	San Diego	CA
Hi-Tech Environmental and Laboratory Services	102013-0	Cypress	CA
HIH Laboratory, Inc.	101233-0	Webster	TX
Hillmann Environmental Company	101421-0	Union	NJ
Hitachi Information Technology Co., Ltd. Nakai Test Site	200186-0	Kanagawa	JAPAN
Hollytex Carpet Mills, Inc.	100247-0	Anadarko	OK
Holometrix - Micromet	100113-0	Bedford	MA
HomeTek Technology Inc.	200331-0	Taipei Shien	TAIWAN
HPNW	100567-0	Tigard	OR
Hub Testing Laboratory, Inc.	101045-0	Waltham	MA
Hubbell Lighting Photometric Laboratory	200020-0	Christiansburg	VA
Hufcor Laboratory	100239-0	Janesville	WI
Hygeia Laboratories Inc.	102116-0	Sierra Madre	CA
Hygeia Laboratories, Inc.	101011-0	Woburn	MA
Hygeia Laboratories, Inc.	102087-0	Marietta	GA
Hygeia Laboratories, Inc.	200335-0	Miami	FL
HYGENIX, INC.	101199-0	Stamford	CT
Hygieneering, Inc.	101997-0	Willowbrook	IL
Hygienetics Laboratory Services	101147-0	Boston	MA

I

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
IBM Austin EMC	200112-0	Austin	TX
IBM Charlote EMC Facility	200337-0	Charlotte	NC
IBM Hudson Valley Acoustics Laboratory	100323-0	Poughkeepsie	NY
IBM Rochester EMC Lab	200091-0	Rochester	MN
IBM RTP PSG EMC Test Labs	200200-0	Research Triangle Park	NC
IBM Yamato EMC Engineering	200198-0	Yamato Kanagawa	JAPAN
ICN Dosimetry Service, Div. of ICN Biomedicals, Inc.	100555-0	Costa Mesa	CA
ILX Lightwave Corporation, Optical Calibration	200211-0	Bozeman	MT
Incotec Laboratory	200339-0	Mojave	CA
Independent Materials Testing Laboratories, Inc.	100316-0	Plainville	CT
Independent Textile Testing Service, Inc.	100166-0	Dalton	GA
Indiana Automotive Fasteners, Inc.	200150-0	Greenfield	IN
Industrial Acoustics Company, Inc., Aero-Acoustics Laboratory	100404-0	Bronx	NY
Industrial Laboratory	102115-0	Portsmouth	VA
InFocus Systems, Inc.	200152-0	Wilsonville	OR
InfoGard Laboratories, Inc.	100432-0	San Luis Obispo	CA
Ingersoll Fasteners	200208-0	Ingersoll Ontario	CANADA
Inland Foundation Engineering, Inc.	100406-0	San Jacinto	CA
Institute for Environmental Assessment	101249-0	Brooklyn Park	MN
Instron Force Calibration Laboratory	105023-0	Canton	MA
Instrument Specialties Co., Inc.	200076-0	Delaware Water Gap	PA
Integrity Design & Test Services, Inc.	200004-0	Littleton	MA
Intermec Technologies Corporation, Norand Mobile System Division	100269-0	Cedar Rapids	IA
International Asbestos Testing Laboratory	101165-0	Mt. Laurel	NJ
International Standards Laboratory	200234-0	Hsichih Chen, Taipei	TAIWAN
Intertek Testing Services	200201-0	Menlo Park	CA
Intertek Testing Services NA Inc.	100270-0	Boxborough	MA
Intertek Testing Services NA Inc.	100274-0	Lexington	KY
Intertek Testing Services NA Inc.	100402-0	Cortland	NY
Intertek Testing Services NA Inc.	100409-0	Norcross	GA
Intertek Testing Services NA Inc.	200031-0	Middleton	WI
Intertek Testing Services NA Inc.	200297-0	Laguna Niguel	CA
Intertek Testing Services NA, Inc.	200049-0	Oakdale	MN
Iowa Environmental Services, Inc.	101990-0	Des Moines	IA
IPS Corporation	200012-0	Nagano	JAPAN
ITEK Enviro Services, Inc.	200032-0	South San Francisco	CA
Ivaco Rolling Mills, Chemistry Laboratory	200143-0	L'Orignal Ontario	CANADA

J

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
J.W. Mfg. DBA Van Petty Mfg.	200225-0	Newbury Park	CA
Japan Quality Assurance Org. Chubu Testing Center Shikatsu Branch	200190-0	Aichi	JAPAN
Japan Quality Assurance Org. Safety Testing Ctr. Tsuru EMC Branch	200192-0	Yamanashi	JAPAN
Japan Quality Assurance Organization Kita-Kansai Testing Center	200191-0	Osaka	JAPAN
Japan Quality Assurance Organization Safety Testing Center	200189-0	Tokyo	JAPAN

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LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Jimmie Ann Bolton	101735-0	Austin	TX
JLC Environmental Consultants, Inc.	101953-0	New York	NY
JMS Environmental Associates, Ltd.	102012-0	Westmont	IL
Johns Manville Technical Center	100425-0	Littleton	CO

K

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
KAM Consultants	102047-0	Long Island City	NY
Kansai Electronic Industry Development Center, Ikoma Testing Lab.	200207-0	Ikoma Nara	JAPAN
Kellco Services, Inc.	101331-0	Hayward	CA
Kevco Services, Inc.	101941-0	Butler	PA
Key Tronic Corp.	200096-0	Spokane	WA
Kingston Environmental Laboratory	200041-0	Lee's Summit	MO
Knauf Fiber Glass Research Laboratory	100248-0	Shelbyville	IN
Kobelco Research Institute, Inc. Stock Company	200169-0	Kobe	JAPAN
Korea Testing & Research Inst. for Chemical Industry-Inchon Off.	200177-0	Inchon	KOREA
Korea Tokin EMC Engineering Co., Ltd.	200220-0	Namyangju-si, Kyunggi-Do	KOREA
KTL Dallas, Inc.	100426-0	Lewisville	TX
KTL Ottawa Inc.	100351-0	Ottawa Ontario	CANADA
Kyowa Kogyosyo Co., Ltd. Test Laboratory	200274-0	Komatsu City, Ishikawa	JAPAN

L

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
LA Testing	200232-0	S. Pasadena	CA
Lab/Cor, Inc.	101920-0	Seattle	WA
Labcorp Analytics Laboratory	101004-0	Richmond	VA
LambdaMetrics, Inc.	200122-0	Cedar Park	TX
Landauer, Inc.	100518-0	Glenwood	IL
Larron Laboratory	101415-0	Cape Girardeau	MO
Law Engineering and Environmental Services, Inc.	101066-0	Birmingham	AL
Law Engineering and Environmental Services, Inc.	101152-0	Houston	TX
Law Engineering and Environmental Services, Inc.	101226-0	Charlotte	NC
Law Engineering and Environmental Services, Inc.	101515-0	Tampa	FL
Law Engineering and Environmental Services, Inc.	101515-1	Miami Lakes	FL
Law Engineering and Environmental Services, Inc.	101847-0	Sterling	VA
Law Engineering and Environmental Services, Inc.	101973-0	Dallas	TX
Law Engineering and Environmental Services, Inc.	102035-0	Phoenix	AZ
Legend Technical Services, Inc.	102081-0	St. Paul	MN
Leland-Powell Fasteners, Inc. Fastener Testing Laboratory	200171-0	Martin	TN
Levecque Technical Center	100101-0	Blue Bell	PA
LG Electronics, Inc., Quality and Reliability Center	200040-0	Seoul	KOREA
Liberty Labs, Inc.	200123-0	Kimballton	IA
Lithonia Testing Laboratories	200007-0	Conyers	GA
Lockheed Martin Control Systems EMI	200142-0	Johnson City	NY

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LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Laboratory			
Lockheed Martin Idaho Tech. Co., Standards and Calibration Lab.	200115-0	Idaho Falls	ID
Lockheed Martin Technical Operations	105017-0	Sunnyvale	CA
Lockheed Martin Utility Services, Inc.	101383-0	Piketon	OH
Loflin Environmental Services	102044-0	Houston	TX
Los Angeles Harbor Department Testing Laboratory	102020-0	Wilmington	CA
Los Angeles Unified School District	101505-0	Los Angeles	CA
Louisiana Department of Environmental Quality Microanalytical Lab	102000-0	Baton Rouge	LA
Lucent Technologies, Global Product Compliance Lab	100275-0	Holmdel	NJ
M			
M&M Manufacturing Corportation	200356-0	Chino	CA
m			
m.a.c. Paran Consulting Services, Inc.	102108-0	Amelia	OH
M			
MAC Fasteners, Inc.	200141-0	Ottawa	KS
MacLean Fasteners - QC Laboratory	200153-0	Mundelein	IL
MacMillan Bloedel Packaging, Inc., Combined Board Test Lab	100259-0	Pine Hill	AL
MACS Lab, Inc.	101948-0	Santa Clara	CA
MagneTek (Lexington) Engineering Laboratory	200053-0	Lexington	TN
Mallinckrodt Group, Inc.	100503-0	Maryland Heights	MO
Marathon Electric - Wausau Engineering Lab.	200134-0	Wausau	WI
Marine Chemist Service, Inc.	101425-0	Newport News	VA
Materials Analytical Services, Inc.	101235-0	Suwanee	GA
Materials Testing, Inc.	100320-0	Milford	CT
Matsushita EMC Center	100428-0	Taki-gun, Hyogo	JAPAN
Maxim Technologies, Inc.	101091-0	Dallas	TX
Maxim Technologies, Inc.	101091-1	Houston	TX
Maxim Technologies, Inc.	101292-0	Billings	MT
Maxim Technologies, Inc.	200046-0	St. Paul	MN
McCall and Spero Environmental, Inc.	101895-0	Louisville	KY
McKee Environmental Health, Inc.	101135-0	Friendswood	TX
Meidoh Laboratory	200239-0	Toyota, Aichi	JAPAN
MET Laboratories, Inc.	100273-0	Baltimore	MD
Metallic Material Laboratory in Toyota Motor Co.	200223-0	Toyota city Aichi	JAPAN
Metroplex Metrology Lab, Inc.	200262-0	Fort Worth	TX
Metropolitan Environmental Testing Services dba METS Laboratories	200165-0	Waldorf	MD
Michael & Associates	100427-0	State College	PA
Micro Air of Texas, Inc.	102008-0	Houston	TX
Micro Air, Inc.	101221-0	Indianapolis	IN
Micro Analytical Laboratories, Inc.	101151-0	Gainesville	FL
Micro Analytical Laboratories, Inc.	101872-0	Emeryville	CA
Micro Analytical Laboratories, Inc.	200054-0	San Francisco	CA
Micro Analytical, Inc.	101247-0	Milwaukee	WI
Microbac Laboratories, Inc.	101035-0	Erie	PA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Micron Environmental Labs	200294-0	Arcadia	CA
Microscopic Analysis, Inc.	101037-0	St. Louis	MO
Midwest Laboratories, Inc.	101894-0	Countryside	IL
Minebea Co., Ltd. Fujisawa Manufacturing Unit	200229-0	Fujisawa, Kanagawa	JAPAN
Minnesota Metrology Laboratory	105003-0	St. Paul	MN
Modern Plating Corporation	200320-0	Freeport	IL
Mohawk Industries, Inc.- Lyerly Plant	100156-0	Lyerly	GA
Motorola PPG Compliance Laboratory	200318-0	Boynton Beach	FL
Motorola Product Quality Assurance Laboratory	200005-0	Mansfield	MA
Motorola SSTG EMC/TEMPEST Laboratory	100405-0	Scottsdale	AZ
Mountain Laboratories	101890-0	Spokane	WA
MQS Inspection, Inc. Magnetic Particle & Liquid Penetrant Exam.	200314-0	Santa Fe Springs	CA
MRS., Analytical Laboratory, Inc.	102113-0	Louisville	KY
Multifastener Laboratory	200267-0	Taylor	MI
Muranaka Environmental Consultants, Inc.	102085-0	Honolulu	HI
Mystic Air Quality Consultants, Inc.	101282-0	Groton	CT
N			
NAHB Research Center, Inc.	100104-0	Upper Marlboro	MD
NASA-Lewis Research Center	200130-0	Cleveland	OH
NATEC International, Inc.	101155-0	Garden Grove	CA
National Analytical Laboratories, Inc.	102080-0	Roseville	CA
National Computing Centre Ltd.	100357-0	Manchester	UNITED KINGDOM
National Econ Corporation	102062-0	Tustin	CA
National Econ Corporation	200047-0	Memphis	TN
National Environmental Reference Laboratory	101593-0	Denver	CO
Naval Dosimetry Center	100504-0	Bethesda	MD
Naval Nuclear Propulsion Program Directorate, Washington, D.C.	100565-0	Bremerton	WA
NAWC AD 5.1.7.3. EMI Lab	100408-0	Patuxent River	MD
NAWC-Aircraft Div. Lakehurst Electromagnetic Interference Lab.	200222-0	Lakehurst	NJ
NAWCWPNS EMI Lab, China Lake/Pt. Mugu, CA	200199-0	China Lake	CA
Nemko EESI, Inc.	200116-0	San Diego	CA
Neutron Engineering Inc.	200145-0	Taipei	TAIWAN
New York Testing Laboratories, Inc.	101332-0	Bay Shore	NY
Newport News Shipbuilding Radiological Control Department	100561-0	Newport News	VA
NGC Testing Services, National Gypsum Research Center	200291-0	Buffalo	NY
Niche Analysis, Inc.	102057-0	Mount Vernon	NY
NJSP Calibration Laboratory	200006-0	Princeton	NJ
Northeast Test Consultants	101565-0	Westbrook	ME
Northeast Utilities Dosimetry Laboratory	100540-0	Newington	CT
Northern Telecom BVW Lab	200098-0	Belleville, Ontario	CANADA
Northern Telecom Inc.	100411-0	Santa Clara	CA
Northern Telecom Product Integrity Labs.	100350-0	Kanata Ontario	CANADA
Northern Testing Laboratories, Inc.	101463-0	Fairbanks	AK
Northwest EMC, Inc.	200059-0	Newberg	OR
Northwest Envirocon, Inc.	101869-0	Vancouver	WA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Northwestern Steel and Wire Company	200224-0	Sterling	IL
Nova Consulting Group, Inc.	101545-0	Chaska	MN
NOVA Machine Products	200202-0	Middleburg Heights	OH
NSS Technologies	200184-0	Plymouth	MI
NVL Laboratories, Inc.	102063-0	Seattle	WA
NY Environmental & Analytical Labs, Inc.	101967-0	Port Washington	NY
NYLOK Fastener Corporation	200272-0	Anaheim	CA
NYLOK Fastener Corporation	200273-0	Macomb	MI
NYLOK Fastener Corporation - Chicago Testing Laboratory	200275-0	Lincolnwood	IL
O			
O & K Company Limited, Osaka Test Center	200166-0	Osaka-Shi	JAPAN
O'Brien & Gere Laboratories, Inc.	101343-0	Syracuse	NY
Oak Ridge Metrology Center	105000-0	Oak Ridge	TN
Oak Ridge National Laboratory	200228-0	Oak Ridge	TN
Oak Ridge National Laboratory Electric Machinery Center	200244-0	Oak Ridge	TN
OCCU-TEC, Inc.	102025-0	Kansas City	MO
Occupational Health Conservation, Inc.	102050-0	Jacksonville	FL
Ohtama Co., Ltd. Yamanashi EMC Test Site	200175-0	Yamanashi	JAPAN
Okai Iron Works Co., Ltd.	200299-0	Izumisano Osaka	JAPAN
Okawa Laboratory	200296-0	Naka-gun, Ibaraki-ken	JAPAN
Oklahoma Dept. of Environmental Quality-State Environmental Lab	102112-0	Oklahoma City	OK
Omni Environmental, Inc.	102061-0	Austin	TX
Orfield Laboratories, Inc.	200248-0	Minneapolis	MN
Osram Sylvania Inc., Test & Measurements Laboratory	100403-0	Beverly	MA
Owari Precise Products Co., Ltd.	200227-0	Nagoya	JAPAN
Owens Corning Testing Systems - Product Testing Laboratory	100109-0	Granville	OH
P			
PA DEP Bureau of Laboratories	101323-0	Harrisburg	PA
Pace Analytical	101265-0	Indianapolis	IN
Pacific Environmental Services, Inc.	101190-0	Herndon	VA
Pacific Gas & Electric Company, Diablo Canyon Nuclear Power Plant	100537-0	Avila Beach	CA
Pacific Northwest National Laboratory	105020-0	Richland	WA
Pacific Rim Environmental, Inc.	101631-0	Tukwila	WA
Paradyne Corporation	200125-0	Largo	FL
Patriot Environmental Laboratory Services	200358-0	Garden Grove	CA
PB Fasteners	200139-0	Gardena	CA
PBS Environmental Building Consultants, Inc.	101910-0	Portland	OR
PCTEST Engineering Laboratory, Inc.	100431-0	Columbia	MD
PDE Laboratories	200082-0	San Clemente	CA
PEP Testing Laboratory	200097-0	Taipei Hsien	TAIWAN
PFS Corporation	100421-0	Madison	WI
PFU TECHNOCONSUL EMC Center	200259-0	Ishikawa-Ken	JAPAN
Philip Analytical Services	101262-0	Reading	PA
Philip Environmental Services Corp.	101192-0	Columbia	IL
Philips Electronics Industries (TAIWAN) Ltd.	200137-0	Chungli, Taoyuan	TAIWAN

(See 'How To Use This Directory' on page 7.)

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Philips Lighting Corporate Calibration & Standards Laboratory	100399-0	Fairmont	WV
Pinchin Environmental Ltd.	101270-0	Mississauga Ontario	CANADA
PMK Group, Inc.	101301-0	Kenilworth	NJ
Portland Bolt and Manufacturing Company, Inc. Testing Laboratory	200168-0	Portland	OR
PP&L, Inc.	100554-0	Allentown	PA
Pratt & Whitney Materials Control Laboratory	200336-0	East Hartford	CT
Precision Micro-Analysis, Inc.	101656-0	Sacramento	CA
Precision Testing Laboratories, Inc.	101580-0	Moore	OK
Prezant Associates, Inc.	101886-0	Seattle	WA
PRIMES (Preflight Integration of Munitions & Electronic Systems)	100422-0	Eglin Air Force Base	FL
Product Safety Engineering, Inc.	200074-0	Dade City	FL
Professional Service Industries, Inc., Pittsburgh Test. Lab. Div.	100430-0	Eugene	OR
Professional Testing (EMI), Inc.	200062-0	Round Rock	TX
Professional Testing Laboratory, Inc.	100297-0	Dalton	GA
ProScience Analytical Services, Inc.	200090-0	Woburn	MA
Prospect Testing Labs, Inc.	200328-0	Des Plaines	IL
Prottsa, S.A. de C.V.	200261-0	Mexico City	MEXICO
Proxtronics, Inc.	100573-0	Burke	VA
PSI	101342-0	Lawrence	KS
PSI	101350-0	Pittsburgh	PA
PSI	101755-0	New York	NY
PSI	101970-0	Brea	CA
PSI, Inc.	100319-0	North Haven	CT
PSI, Inc.	101070-0	Farmingdale	NY
PSI, Inc.	200042-0	New Berlin	WI
Puget Sound Naval Shipyard	101539-0	Bremerton	WA

Q

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
QuanTEM Laboratories, LLC	101959-0	Oklahoma City	OK
Queen Carpet Test Laboratory	100429-0	Dalton	GA
Quest Engineering Solutions, Inc.	200036-0	N. Billerica	MA
Quest MicroAnalytics, Inc.	200249-0	Dallas	TX
Quietek Corporation	200347-0	Hsin-Chu City	TAIWAN

R

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
R & B Enterprises	100280-0	West Conshohocken	PA
R & D Services, Inc.	200265-0	Cookeville	TN
R. Robinson Analytical Services, Inc.	102041-0	Pensacola	FL
Radiation Detection Company	100512-0	Sunnyvale	CA
Radiation Laboratory, Taiwan Power Company	100562-0	Shihmen, Taipei	TAIWAN
Radiation Technology, Inc.	200086-0	San Jose	CA
Rapid Environmental Management, Inc.	101974-0	Great Neck	NY
Raytheon Technical Services Co. EMI Laboratory	200317-0	Indianapolis	IN
RCM Laboratories, Inc.	101853-0	Countryside	IL
Republic Fastener Manufacturing	200195-0	Newbury Park	CA
Reservoirs Environmental Services, Inc.	101896-0	Denver	CO
Reservoirs Environmental Services, Inc.	101896-1	Houston	TX
Resources, Applications, Designs & Control,	100261-0	Long Beach	CA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Inc. (RADCO)			
Retlif Testing Laboratories	100267-0	Ronkonkoma	NY
Retlif Testing Laboratories	100267-1	Goffstown	NH
Rhein Tech Laboratories, Inc.	200061-0	Herndon	VA
RheinTexas, Inc.	200245-0	Plano	TX
RI Analytical Laboratories, Inc.	101440-0	Warwick	RI
Rice Lake Weighing Systems	105001-0	Rice Lake	WI
Ricoh Company LTD. Ohmori Acoustics Test Site	200345-0	Tokyo	JAPAN
Ricoh Company, Ltd. Ohmori EMC Center	200163-0	Tokyo	JAPAN
Rightway Fasteners, Inc.	200210-0	Columbus	IN
Riverbank Acoustical Laboratories	100227-0	Geneva	IL
RJ Lee Group, Inc.	101208-0	Monroeville	PA
RJ Lee Group, Inc.	101208-2	San Leandro	CA
RJ Lee Group, Inc.	101208-3	Manassas	VA
RJ Lee Group, Inc.	101208-5	Houston	TX
Robbins Manufacturing Co., Inc.	200161-0	Fall River	MA
Rockford Bolt & Steel Co.	200255-0	Rockford	IL
Rockford Engineering Services, Inc.	200172-0	Sunol	CA
Rocknel Fastener Inc.	200307-0	Rockford	IL
Rogers Labs, Inc.	200087-0	Louisburg	KS
Roy F. Weston, Inc.	101254-0	Auburn	AL
S			
S&ME, Inc.	102075-0	Charlotte	NC
Safe Environment of America	102021-0	Kent	WA
San Shing Hardware Works Co., Ltd. Test Laboratory	200158-0	Tainan	TAIWAN
Sandia National Laboratories	105002-0	Albuquerque	NM
Sannohashi Corporation	200205-0	Yashioshi, Saitama-ken	JAPAN
Saturn Fasteners, Inc.	200327-0	Burbank	CA
Schneider Laboratories, Inc.	101150-0	Richmond	VA
Scientific Laboratories, Inc.	101904-0	Midlothian	VA
Scientific Laboratories, Inc.	101904-1	New York	NY
SCILAB BOSTON, Inc.	102079-0	East Weymouth	MA
SCILAB California, Inc.	200346-0	Carson	CA
SEAS, Inc.	101185-0	Blacksburg	VA
Seiko Epson Corporation	200157-0	Shiojiri-City Nagano	JAPAN
Severn Trent Laboratories (MA)	101005-0	N. Billerica	MA
SGI EMC Laboratories	200233-0	Mountain View	CA
SGS U.S. Testing Company, Inc.	100416-0	Tulsa	OK
Shaw Industries, Inc., Central Laboratory Operations	100193-0	Dalton	GA
Small IAC Test Laboratory	200287-0	Peterborough, ON	CANADA
SNB Laboratory	200308-0	Cumberland	RI
Solar Environmental Services, Inc.	102006-0	Anchorage	AK
Sony Atsugi EMC Site	200285-0	Shinagawa, Tokyo	JAPAN
Sony Electronics Inc. Product Quality Division EMC Group	200312-0	San Diego	CA
Sony Minokamo EMC Site	200368-0	Gifu-Pref.	JAPAN
South Carolina Department of Health & Environmental Control	101572-0	Columbia	SC
South Coast Air Quality Management District	101567-0	Diamond Bar	CA
South Texas Project Dosimetry Laboratory	100519-0	Wadsworth	TX
Southern California Edison	100506-0	San Clemente	CA
Southern California Edison Company	105014-0	Westminster	CA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Special Testing Laboratories, Inc.	100308-0	Bethel	CT
Spectrum Research & Testing Laboratory, Inc.	200099-0	Chung-Li, Taoyuan	TAIWAN
Sporton International, Inc.	200079-0	Taipei Hsien	TAIWAN
SPS Technologies Aerospace Product Division	200298-0	Santa Ana	CA
SPS Technologies; Aerospace Fastener Group	200164-0	Jenkintown	PA
St. of California, Bur. of Home Furnishings & Thermal Insulation	100251-0	North Highlands	CA
STAT Analysis Corporation	101202-0	Chicago	IL
State of Connecticut	101237-0	Hartford	CT
State of Virginia Metrology Lab	105007-0	Richmond	VA
STERIS-Isomedix Services	200235-0	Whippany	NJ
Steve Moody Micro Services, Inc.	102056-0	Carrollton	TX
Storagtek Open Area Test Site	200251-0	Louisville	CO
STS Consultants, Ltd.	100191-0	Vernon Hills	IL
Sugiura Seisakusho Co., Ltd.	200226-0	Nishio Aichi	JAPAN
Sumitomo Metal Technology, Inc. Kokura Division	200215-0	Kitakyushu	JAPAN
Sun City Analytical, Inc.	101870-0	El Paso	TX
Sun Microsystems, Inc. EMC Testing	200363-0	Palo Alto	CA
Sundram Fasteners Limited (Inhouse test laboratory)	200212-0	Chennai (Madras), Tamil, Nadh	INDIA
Sundram Fasteners Limited Chemical Testing Laboratory	200256-0	Andhra Pradesh	INDIA
Super Cheng Industrial Testing Laboratory	200280-0	Kaohsiung, Kangshan	TAIWAN

T

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Taiwan Tokin EMC Eng. Corp.	200077-0	Taipei	TAIWAN
TAO/TA2 EMC Laboratory	200140-0	Taoyuan	TAIWAN
Taylor Environmental Group, Inc.	102101-0	Floral Park	NY
TC Analytics, Inc.	101672-0	Norfolk	VA
TDK Corporation's 10m Anechoic Chamber and Chikumagawa Open Site	200309-0	Ichikawa-shi, Chiba-ken	JAPAN
TDK Corporation's Chikumagawa Open Site	200319-0	Saku-shi, Nagano-ken	JAPAN
TEAC Corporation EMC Center	200362-0	Iruma-shi	JAPAN
TEC-AN, Inc.	200325-0	Oklahoma City	OK
TEM, Incorporated	101130-0	Glen Ellyn	IL
Tennessee Valley Authority External Dosimetry Service	100516-0	Soddy-Daisy	TN
Test Site Services, Inc.	100419-0	Marlboro	MA
Test-Con Incorporated	200018-0	Danbury	CT
Testing Mechanics Corp.	102001-0	Seaford	NY
Testwell Laboratories, Inc./Testwell Industries, Inc.	200083-0	Ossining	NY
The Monadnock Company	200268-0	City of Industry	CA
The Perryman Company	200128-0	Houston	PA
The Scott Lawson Group, Ltd.	101228-0	Concord	NH
Thomas Lighting Accent Division Photometric Laboratory	200155-0	Los Angeles	CA
Timberco, Inc.- dba TECO	100420-0	Eugene	OR
Tokin EMC Engineering Co., Ltd. Kawasaki Facility	200217-0	Kawasaki-city, Kanagawa	JAPAN
Tokin EMC Engineering Co., Ltd. Nagoya Testing Laboratory	200219-0	Daian-cho, Inabe-gun, Mie	JAPAN

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Tokin EMC Engineering Co., Ltd. Osaka Testing Laboratory	200218-0	Sanda-city, Hyogo	JAPAN
Tokin EMC Engineering Co., Ltd. Tsukuba Testing Laboratory	200221-0	Tsukuba-city, Ibaraki	JAPAN
TolTest, Inc.	101594-0	Toledo	OH
Topura Co., Ltd.	200181-0	Hadano Kanagawa	JAPAN
Topura Co., Ltd. Osaka	200242-0	Katano, Osaka	JAPAN
Topura Co., Ltd. Tokai	200243-0	Ogasagun,Shizuoka	JAPAN
Toshiba Corp., Ome Works	200107-0	Ome Tokyo	JAPAN
Toshiba/Houston Test Laboratory	200088-0	Houston	TX
Training Research Co., Ltd.	200174-0	Taipei	TAIWAN
TRC Environmental Corporation	101424-0	Windsor	CT
Tremco, Inc. - Roofing Division, An RPM Company	101188-0	Beachwood	OH
Tri-State Materials Testing Lab, Inc.	200010-0	Newington	CT
Triad Environmental Consulting, Inc.	102073-0	Huntington	WV
Troxler Radiation Monitoring Svc. a div. of Troxler Elect. Labs	100559-0	Research Triangle Park	NC
TSi, Testing Services, Inc.	100108-0	Dalton	GA
TU Electric-Comanche Peak Steam Electric Station	100528-0	Glen Rose	TX
TUV Product Service, Inc.	100268-0	San Diego	CA
TUV Product Service, Inc.	100271-0	New Brighton	MN
TUV Product Service, Inc.	100271-1	Boulder	CO
TUV Rheinland of North America, Inc.	200111-0	Newtown	CT
TUV Telecom Services, Inc.	200039-0	St. Paul	MN
TWN Fastener, Inc.	200194-0	Bowling Green	KY

U

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
U.S. Army Center for Health Promotion and Preventive Medicine	200044-0	Aberdeen Proving Ground	MD
U.S. Army Primary Standards Laboratory	105004-0	Redstone Arsenal	AL
U.S. Army Radiation Standards & Dosimetry Laboratory	100539-0	Redstone Arsenal	AL
U.S. EPA	200231-0	Las Vegas	NV
U.S. EPA - National Enforcement Investigations Center	101703-0	Denver	CO
UltraTech Engineering Labs Inc.	200093-0	Mississauga, Ontario	CANADA
Underwriters Laboratories	200252-0	Santa Clara	CA
Underwriters Laboratories Inc.	100414-0	Northbrook	IL
Underwriters Laboratories Inc.	200214-0	Camas	WA
Underwriters Laboratories, Inc.	100255-0	Melville	NY
Underwriters Laboratories, Inc.	200246-0	Research Triangle Park	NC
Union Electric Company, Callaway Plant	100502-0	Fulton	MO
United Analytical Services, Inc.	101732-0	Hillside	IL
United States Dosimetry Technology, Inc.	100571-0	Richland	WA
United States Technologies, Inc.	200162-0	Alpharetta	GA
United Steel and Fasteners Inc.	200341-0	Itasca	IL
Universal Compliance Laboratories	200117-0	San Jose	CA
University (State) Hygienic Laboratory	101288-0	Iowa City	IA
University of Alabama Asbestos Laboratory	102005-0	Tuscaloosa	AL
US Air Force Center for Radiation Dosimetry	100548-0	Brooks AFB	TX
USG Research-Systems Evaluation Laboratory	200132-0	Libertyville	IL

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
V			
Vartest Laboratories, Inc.	200027-0	New York	NY
Vermont Fasteners Manufacturing	200254-0	Swanton	VT
Vibro-Acoustics Laboratory	100424-0	Scarborough Ontario	CANADA
Volz Environmental Services, Inc.	101269-0	Pittsburgh	PA
Vulcan Rivet and Bolt Corporation	200277-0	Birmingham	AL
W			
W.R. Grace & Co.	200258-0	Cambridge	MA
Walker Bolt Manufacturing Co.	200126-0	Houston	TX
Washington Laboratories, Ltd.	200066-0	Gaithersburg	MD
Waste Management Federal Services of Hanford, Inc.	101058-0	Richland	WA
Water, Earth Solutions & Technologies, Inc.	102043-0	Dallas	TX
Wausau Insurance Companies	101079-0	Wausau	WI
Wayne Langston, Inc.	200021-0	League City	TX
Webber Gage Division / L.S. Starrett Co.	200038-0	Cleveland	OH
Western Analytical Laboratory	200037-0	Burbank	CA
Western Electro-Acoustic Lab., Inc.	100256-0	Santa Monica	CA
White Environmental Consultants Inc.	200124-0	Anchorage	AK
White Environmental Consultants, Inc.	200350-0	Honolulu	HI
Willamette Industries, Inc. West Coast Development Lab	200045-0	Wilsonville	OR
Wilson-Garner Company	200136-0	Harrison Township	MI
Windermere Info. Tech. Sys. Military/Commercial Compliance Lab.	200084-0	Annapolis	MD
Wisconsin Occupational Health Laboratory	101109-0	Madison	WI
WKP Laboratories, Inc.	101950-0	Ossining	NY
Wolverine Plating Corp.	200230-0	Roseville	MI
Wonder Makers Environmental, Inc.	102065-0	Kalamazoo	MI
World Carpets, Inc.	100197-0	Dalton	GA
Y			
Yamaha Motor Metal Testing Laboratory Fasteners and Metals	200276-0	Iwata Shizuoka	JAPAN
Z			
Zacta Technology Corporation Yonezawa Testing Center	200306-0	Yonezawa-shi Yamagata	JAPAN

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LISTING BY FIELD OF ACCREDITATION

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY

CALIBRATION LABORATORIES GROUP

Dimensional

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
AlliedSignal FM&T Metrology	200108-0	Kansas City	MO
Lockheed Martin Idaho Tech. Co., Standards and Calibration Lab.	200115-0	Idaho Falls	ID
Lockheed Martin Technical Operations	105017-0	Sunnyvale	CA
Metroplex Metrology Lab, Inc.	200262-0	Fort Worth	TX
Minnesota Metrology Laboratory	105003-0	St. Paul	MN
Oak Ridge Metrology Center	105000-0	Oak Ridge	TN
Sandia National Laboratories	105002-0	Albuquerque	NM
Southern California Edison Company	105014-0	Westminster	CA
State of Virginia Metrology Lab	105007-0	Richmond	VA
Webber Gage Division / L.S. Starrett Co.	200038-0	Cleveland	OH

Electromagnetics - DC/Low Frequency

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Compaq Corporate Metrology	200154-0	Houston	TX
Fluke Corporation Primary Standards Laboratory	105016-0	Everett	WA
GE Industrial Systems, Renewal Services - TEMS	200029-0	Rome	NY
Lockheed Martin Idaho Tech. Co., Standards and Calibration Lab.	200115-0	Idaho Falls	ID
Lockheed Martin Technical Operations	105017-0	Sunnyvale	CA
Sandia National Laboratories	105002-0	Albuquerque	NM
Southern California Edison Company	105014-0	Westminster	CA
U.S. Army Primary Standards Laboratory	105004-0	Redstone Arsenal	AL

Electromagnetics - RF/Microwave

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Compaq Corporate Metrology	200154-0	Houston	TX
Liberty Labs, Inc.	200123-0	Kimballton	IA
Sandia National Laboratories	105002-0	Albuquerque	NM
U.S. Army Primary Standards Laboratory	105004-0	Redstone Arsenal	AL

Ionizing Radiation

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
CDRH X-Ray Calibration Laboratory	105018-0	Rockville	MD
Pacific Northwest National Laboratory	105020-0	Richland	WA
Sandia National Laboratories	105002-0	Albuquerque	NM
STERIS-Isomedix Services	200235-0	Whippany	NJ
U.S. Army Primary Standards Laboratory	105004-0	Redstone Arsenal	AL

Mechanical

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
AlliedSignal FM&T Metrology	200108-0	Kansas City	MO
Denver Instrument Co. Weight Lab	200106-0	Arvada	CO
Henry Troemner, Inc.	105013-0	Philadelphia	PA
Instron Force Calibration Laboratory	105023-0	Canton	MA
Lockheed Martin Technical Operations	105017-0	Sunnyvale	CA
Minnesota Metrology Laboratory	105003-0	St. Paul	MN
Rice Lake Weighing Systems	105001-0	Rice Lake	WI
Sandia National Laboratories	105002-0	Albuquerque	NM
Southern California Edison Company	105014-0	Westminster	CA
State of Virginia Metrology Lab	105007-0	Richmond	VA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Optical Radiation			
ILX Lightwave Corporation, Optical Calibration	200211-0	Bozeman	MT
Thermodynamic			
Fluke Corporation Primary Standards Laboratory	105016-0	Everett	WA
GE Industrial Systems, Renewal Services - TEMS	200029-0	Rome	NY
Lockheed Martin Technical Operations	105017-0	Sunnyvale	CA
Minnesota Metrology Laboratory	105003-0	St. Paul	MN
Sandia National Laboratories	105002-0	Albuquerque	NM
State of Virginia Metrology Lab	105007-0	Richmond	VA
U.S. Army Primary Standards Laboratory	105004-0	Redstone Arsenal	AL
Time & Frequency			
Compaq Corporate Metrology	200154-0	Houston	TX
Fluke Corporation Primary Standards Laboratory	105016-0	Everett	WA
Lockheed Martin Idaho Tech. Co., Standards and Calibration Lab.	200115-0	Idaho Falls	ID
Lockheed Martin Technical Operations	105017-0	Sunnyvale	CA
Sandia National Laboratories	105002-0	Albuquerque	NM
State of Virginia Metrology Lab	105007-0	Richmond	VA
U.S. Army Primary Standards Laboratory	105004-0	Redstone Arsenal	AL
COMPUTER/ELECTRONICS GROUP			
Cryptographic Modules Testing			
Cryptographic Equipment Assessment Lab. (CEAL)	200002-0	McLean	VA
DOMUS ITSL, a division of LGS Group, Incorporated	200017-0	Ottawa Ontario	CANADA
InfoGard Laboratories, Inc.	100432-0	San Luis Obispo	CA
GOSIP			
Control Data Accredited OSI Test Center	100354-0	Arden Hills	MN
National Computing Centre Ltd.	100357-0	Manchester	UNITED KINGDOM
Federal Communications Commission (FCC) Methods			
3M Product Safety EMC Laboratory	200033-0	St. Paul	MN
A-Pex International Co., Ltd. Yokowa Laboratory	200109-0	Mie-ken	JAPAN
Advance Data Technology Corporation	200102-0	Taipei Hsien	TAIWAN
AHD	200129-0	Dowagiac	MI
Akzo Kashima Ltd. Kakegawa EMC Test Site	100290-2	Shizuoka	JAPAN
Akzo Kashima Ltd., Kashima EMC Site	100290-0	Ibaraki	JAPAN
Akzo Kashima Ltd., Kawasaki Technical Center	200300-0	Kawasaki	JAPAN
Akzo Kashima Ltd., Matsuda EMC Test Site	100290-4	Kanagawa	JAPAN
Akzo Kashima Ltd., Nagano EMC Test Site	100290-3	Nagano	JAPAN
Akzo Kashima Ltd., Tochigi EMC Test Site	100290-5	Tochigi	JAPAN
Analab, LLC	200260-0	Sterling	PA
Apple Computer, Inc., EMC Compliance	200071-0	Cupertino	CA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Laboratory			
AST Research, Inc. EMC Lab.	200135-0	Irvine	CA
Bay Area Compliance Laboratory, Corp.	200167-0	Sunnyvale	CA
Cabletron Systems, Inc.	200121-0	Rochester	NH
Canadian Standards Association	100322-0	Etobicoke Ontario	CANADA
Celestica International Inc.	200055-0	North York, Ontario	CANADA
Chemitox EMC Research, Inc.	200120-0	Yamanashi-ken	JAPAN
Chomerics Test Services (CTS)	100296-0	Woburn	MA
Cisco Systems, Inc.	200114-0	San Jose	CA
Communication Certification Laboratory	100272-0	Salt Lake City	UT
Compaq Computer Corp. EMC Test Facility	200078-0	Colorado Springs	CO
Compaq Computer Corp. Emissions Control Lab	200058-0	Houston	TX
Compatible Electronics, Inc.	200063-0	Agoura	CA
Compliance Eng. Svces, Inc., Compliance Certification Services	200065-0	Sunnyvale	CA
Compliance Engineering Services, Inc. - Taiwan	200064-0	Sunnyvale	CA
Compliance Test Laboratories, Inc.	200237-0	Liberty	SC
Cosmos Corporation	200151-0	Watarai-gun Mie	JAPAN
Criterion Technology	100396-0	Rollinsville	CO
Curtis-Straus LLC	200057-0	Littleton	MA
D.L.S. Electronic Systems, Inc.	100276-0	Wheeling	IL
Data General Corporation	100339-0	Westboro	MA
Dell Regulatory Test Laboratories	200052-0	Round Rock	TX
Digital Regulatory Engineering and Testing Services	100413-0	Marlboro	MA
Diviersified T.E.S.T. Technologies, Inc.	200340-0	Groton	NY
Eastman Kodak Co.-Regulatory Compliance Center-EMC Facility	200313-0	Rochester	NY
Electro Magnetic Test, Inc.	200147-0	Mountain View	CA
Electro. Meas. Off., Yokohama Res. & Dev. Ctr. Murata Mfg. Co.	200263-0	Kanagawa	JAPAN
Electronic Compliance Laboratories, Inc.	200089-0	Sunnyvale	CA
Electronic Research & Service Organization/ITRI	200118-0	Hsinchu	TAIWAN
Electronics Test Centre	200282-0	Kanata, Ont.	CANADA
Electronics Testing Center, Taiwan	200133-0	Taoyuan Hsien	TAIWAN
Elite Electronic Engineering Company	100278-0	Downers Grove	IL
Elliott Laboratories, Inc.	200069-0	Sunnyvale	CA
EMC Compliance Mgmt Group, dba Turntech Scientific & Instr., Inc.	200068-0	Mountain View	CA
EMC International, Inc.	200094-0	Youngsville	NC
EMC Kashima Corporation	200070-0	Chiba-ken	JAPAN
EMCE Engineering, Inc.	200092-0	Fremont	CA
Fountain Compliance Laboratory	200101-0	Somerset	NJ
Fujitsu Evaluation Engineering Laboratory	200281-0	Numazu, Shizuoka-Pref.	JAPAN
Fujitsu General EMC Laboratory	200373-0	Kawasaki	JAPAN
Garwood Laboratories, Inc.	200119-0	Placentia	CA
Global EMC Standard Tech. Corp.	200085-0	Taipei County	TAIWAN
Hayes Microcomputer Products, Inc.	200103-0	Atlanta	GA
Hewlett Packard, Product Test Lab, San	200138-0	San Diego	CA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Diego			
Hitachi Information Technology Co., Ltd. Nakai Test Site	200186-0	Kanagawa	JAPAN
HomeTek Technology Inc.	200331-0	Taipei Shien	TAIWAN
IBM Austin EMC	200112-0	Austin	TX
IBM Charlote EMC Facility	200337-0	Charlotte	NC
IBM Rochester EMC Lab	200091-0	Rochester	MN
IBM RTP PSG EMC Test Labs	200200-0	Research Triangle Park	NC
IBM Yamato EMC Engineering	200198-0	Yamato Kanagawa	JAPAN
InFocus Systems, Inc.	200152-0	Wilsonville	OR
Instrument Specialties Co., Inc.	200076-0	Delaware Water Gap	PA
Integrity Design & Test Services, Inc.	200004-0	Littleton	MA
Intermec Technologies Corporation, Norand Mobile System Division	100269-0	Cedar Rapids	IA
International Standards Laboratory	200234-0	Hsichih Chen, Taipei	TAIWAN
Intertek Testing Services	200201-0	Menlo Park	CA
Intertek Testing Services NA Inc.	100270-0	Boxborough	MA
Intertek Testing Services NA Inc.	100274-0	Lexington	KY
Intertek Testing Services NA Inc.	100409-0	Norcross	GA
Intertek Testing Services NA Inc.	200297-0	Laguna Niguel	CA
Intertek Testing Services NA, Inc.	200049-0	Oakdale	MN
IPS Corporation	200012-0	Nagano	JAPAN
Japan Quality Assurance Org. Chubu Testing Center Shikatsu Branch	200190-0	Aichi	JAPAN
Japan Quality Assurance Org. Safety Testing Ctr. Tsuru EMC Branch	200192-0	Yamanashi	JAPAN
Japan Quality Assurance Organization Kita-Kansai Testing Center	200191-0	Osaka	JAPAN
Japan Quality Assurance Organization Safety Testing Center	200189-0	Tokyo	JAPAN
Kansai Electronic Industry Development Center, Ikoma Testing Lab.	200207-0	Ikoma Nara	JAPAN
Key Tronic Corp.	200096-0	Spokane	WA
Korea Tokin EMC Engineering Co., Ltd.	200220-0	Namyangju-si, Kyunggi-Do	KOREA
KTL Dallas, Inc.	100426-0	Lewisville	TX
KTL Ottawa Inc.	100351-0	Ottawa Ontario	CANADA
LambdaMetrics, Inc.	200122-0	Cedar Park	TX
LG Electronics, Inc., Quality and Reliability Center	200040-0	Seoul	KOREA
Lucent Technologies, Global Product Compliance Lab	100275-0	Holmdel	NJ
Matsushita EMC Center	100428-0	Taki-gun, Hyogo	JAPAN
MET Laboratories, Inc.	100273-0	Baltimore	MD
Motorola PPG Compliance Laboratory	200318-0	Boynton Beach	FL
Motorola Product Quality Assurance Laboratory	200005-0	Mansfield	MA
Motorola SSTG EMC/TEMPEST Laboratory	100405-0	Scottsdale	AZ
Nemko EESI, Inc.	200116-0	San Diego	CA
Neutron Engineering Inc.	200145-0	Taipei	TAIWAN
Northern Telecom BVW Lab	200098-0	Belleville, Ontario	CANADA
Northern Telecom Inc.	100411-0	Santa Clara	CA
Northern Telecom Product Integrity Labs.	100350-0	Kanata Ontario	CANADA

(See 'How To Use This Directory' on page 7.)

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Northwest EMC, Inc.	200059-0	Newberg	OR
Ohtama Co., Ltd. Yamanashi EMC Test Site	200175-0	Yamanashi	JAPAN
Paradyne Corporation	200125-0	Largo	FL
PCTEST Engineering Laboratory, Inc.	100431-0	Columbia	MD
PDE Laboratories	200082-0	San Clemente	CA
PEP Testing Laboratory	200097-0	Taipei Hsien	TAIWAN
PFU TECHNOCONSUL EMC Center	200259-0	Ishikawa-Ken	JAPAN
Philips Electronics Industries (TAIWAN) Ltd.	200137-0	Chungli, Taoyuan	TAIWAN
Product Safety Engineering, Inc.	200074-0	Dade City	FL
Professional Testing (EMI), Inc.	200062-0	Round Rock	TX
Quest Engineering Solutions, Inc.	200036-0	N. Billerica	MA
Quietek Corporation	200347-0	Hsin-Chu City	TAIWAN
R & B Enterprises	100280-0	West Conshohocken	PA
Radiation Technology, Inc.	200086-0	San Jose	CA
Retlif Testing Laboratories	100267-0	Ronkonkoma	NY
Retlif Testing Laboratories	100267-1	Goffstown	NH
Rhein Tech Laboratories, Inc.	200061-0	Herndon	VA
RheinTexas, Inc.	200245-0	Plano	TX
Ricoh Company, Ltd. Ohmori EMC Center	200163-0	Tokyo	JAPAN
Rockford Engineering Services, Inc.	200172-0	Sunol	CA
Rogers Labs, Inc.	200087-0	Louisburg	KS
Seiko Epson Corporation	200157-0	Shiojiri-City Nagano	JAPAN
SGI EMC Laboratories	200233-0	Mountain View	CA
Sony Atsugi EMC Site	200285-0	Shinagawa, Tokyo	JAPAN
Sony Electronics Inc. Product Quality Division EMC Group	200312-0	San Diego	CA
Sony Minokamo EMC Site	200368-0	Gifu-Pref.	JAPAN
Spectrum Research & Testing Laboratory, Inc.	200099-0	Chung-Li, Taoyuan	TAIWAN
Sporton International, Inc.	200079-0	Taipei Hsien	TAIWAN
Storagtek Open Area Test Site	200251-0	Louisville	CO
Sun Microsystems, Inc. EMC Testing	200363-0	Palo Alto	CA
Taiwan Tokin EMC Eng. Corp.	200077-0	Taipei	TAIWAN
TAO/TA2 EMC Laboratory	200140-0	Taoyuan	TAIWAN
TDK Corporation's 10m Anechoic Chamber and Chikumagawa Open Site	200309-0	Ichikawa-shi, Chiba-ken	JAPAN
TDK Corporation's Chikumagawa Open Site	200319-0	Saku-shi, Nagano-ken	JAPAN
TEAC Corporation EMC Center	200362-0	Iruma-shi	JAPAN
Test Site Services, Inc.	100419-0	Marlboro	MA
Tokin EMC Engineering Co., Ltd. Kawasaki Facility	200217-0	Kawasaki-city, Kanagawa	JAPAN
Tokin EMC Engineering Co., Ltd. Nagoya Testing Laboratory	200219-0	Daian-cho, Inabe-gun, Mie	JAPAN
Tokin EMC Engineering Co., Ltd. Osaka Testing Laboratory	200218-0	Sanda-city, Hyogo	JAPAN
Tokin EMC Engineering Co., Ltd. Tsukuba Testing Laboratory	200221-0	Tsukuba-city, Ibaraki	JAPAN
Toshiba Corp., Ome Works	200107-0	Ome Tokyo	JAPAN
Training Research Co., Ltd.	200174-0	Taipei	TAIWAN
TUV Product Service, Inc.	100268-0	San Diego	CA
TUV Product Service, Inc.	100271-0	New Brighton	MN

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
TUV Product Service, Inc.	100271-1	Boulder	CO
TUV Rheinland of North America, Inc.	200111-0	Newtown	CT
TUV Telecom Services, Inc.	200039-0	St. Paul	MN
UltraTech Engineering Labs Inc.	200093-0	Mississauga, Ontario	CANADA
Underwriters Laboratories	200252-0	Santa Clara	CA
Underwriters Laboratories Inc.	100414-0	Northbrook	IL
Underwriters Laboratories Inc.	200214-0	Camas	WA
Underwriters Laboratories, Inc.	100255-0	Melville	NY
Underwriters Laboratories, Inc.	200246-0	Research Triangle Park	NC
United States Technologies, Inc.	200162-0	Alpharetta	GA
Universal Compliance Laboratories	200117-0	San Jose	CA
Washington Laboratories, Ltd.	200066-0	Gaithersburg	MD
Wayne Langston, Inc.	200021-0	League City	TX
Windermere Info. Tech. Sys. Military/Commercial Compliance Lab.	200084-0	Annapolis	MD
Zacta Technology Corporation Yonezawa Testing Center	200306-0	Yonezawa-shi Yamagata	JAPAN

MIL-STD-462 Test Methods

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Acton Environmental Testing, dba National Technical Systems	100347-0	Boxborough	MA
Eaton E3 Laboratory	100382-0	Southfield	MI
Elite Electronic Engineering Company	100278-0	Downers Grove	IL
GEC Marconi Avionics Ltd Environmental and EMC Test Center	200304-0	Kent	UNITED KINGDOM
Intertek Testing Services NA Inc.	100270-0	Boxborough	MA
Lockheed Martin Control Systems EMI Laboratory	200142-0	Johnson City	NY
Motorola SSTG EMC/TEMPEST Laboratory	100405-0	Scottsdale	AZ
NAWC AD 5.1.7.3. EMI Lab	100408-0	Patuxent River	MD
NAWC-Aircraft Div. Lakehurst Electromagnetic Interference Lab.	200222-0	Lakehurst	NJ
NAWCWPNS EMI Lab, China Lake/Pt. Mugu, CA	200199-0	China Lake	CA
PRIMES (Preflight Integration of Munitions & Electronic Systems)	100422-0	Eglin Air Force Base	FL
R & B Enterprises	100280-0	West Conshohocken	PA
Raytheon Technical Services Co. EMI Laboratory	200317-0	Indianapolis	IN
Retlif Testing Laboratories	100267-0	Ronkonkoma	NY
TUV Product Service, Inc.	100268-0	San Diego	CA
TUV Product Service, Inc.	100271-0	New Brighton	MN

DOSIMETRY GROUP

Ionizing Radiation Dosimetry

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Arizona Public Service Co., Palo Verde Nuclear Generating Station	100536-0	Tonopah	AZ
Atomic Energy Industrial Laboratory of the Southwest, Inc.	100556-0	Houston	TX
Baltimore Gas & Electric Company	100501-0	Lusby	MD
Battelle - Pacific Northwest National Laboratory	200216-0	Richland	WA
Carolina Power & Light Company, Harris	100517-0	New Hill	NC

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Energy & Enviro. Center			
Clinton Power Station	100570-0	Clinton	IL
Combustion Engineering, Inc.	100563-0	Windsor	CT
ComEd - TLD Processing Lab - CTEAM Facility	100541-0	Bolingbrook	IL
Con Edison, Indian Point	100538-0	Buchanan	NY
Detroit Edison, Fermi 2 Dosimetry Laboratory	100529-0	Newport	MI
Duke Engineering and Services Environmental Laboratory	100524-0	Bolton	MA
Duke Power Company Dosimetry Laboratory	100505-0	Charlotte	NC
Duquesne Light Company, Beaver Valley Power Station	100521-0	Shippingport	PA
Eberline Dosimetry Service	100515-0	Albuquerque	NM
Electric Boat Corp/A General Dynamics Co. Radiological Ctrl. Dept	100560-0	Groton	CT
Entergy Operations, Inc.	100535-0	Taft	LA
Florida Power & Light Company	100544-0	Juno Beach	FL
Georgia Power Company/Enviro. Affairs, Enviro. Lab-Dosimetry	100551-0	Smyrna	GA
Ginna Nuclear Station	100514-0	Ontario	NY
GPU Nuclear Corp.	100510-0	Middletown	PA
HPNW	100567-0	Tigard	OR
ICN Dosimetry Service, Div. of ICN Biomedicals, Inc.	100555-0	Costa Mesa	CA
Landauer, Inc.	100518-0	Glenwood	IL
Mallinckrodt Group, Inc.	100503-0	Maryland Heights	MO
Naval Dosimetry Center	100504-0	Bethesda	MD
Naval Nuclear Propulsion Program Directorate, Washington, D.C.	100565-0	Bremerton	WA
Newport News Shipbuilding Radiological Control Department	100561-0	Newport News	VA
NJSP Calibration Laboratory	200006-0	Princeton	NJ
Northeast Utilities Dosimetry Laboratory	100540-0	Newington	CT
Pacific Gas & Electric Company, Diablo Canyon Nuclear Power Plant	100537-0	Avila Beach	CA
PP&L, Inc.	100554-0	Allentown	PA
Proxtronics, Inc.	100573-0	Burke	VA
Radiation Detection Company	100512-0	Sunnyvale	CA
Radiation Laboratory, Taiwan Power Company	100562-0	Shihmen, Taipei	TAIWAN
South Texas Project Dosimetry Laboratory	100519-0	Wadsworth	TX
Southern California Edison	100506-0	San Clemente	CA
Tennessee Valley Authority External Dosimetry Service	100516-0	Soddy-Daisy	TN
Troxler Radiation Monitoring Svc. a div. of Troxler Elect. Labs	100559-0	Research Triangle Park	NC
TU Electric-Comanche Peak Steam Electric Station	100528-0	Glen Rose	TX
U.S. Army Radiation Standards & Dosimetry Laboratory	100539-0	Redstone Arsenal	AL
U.S. EPA	200231-0	Las Vegas	NV

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Union Electric Company, Callaway Plant	100502-0	Fulton	MO
United States Dosimetry Technology, Inc.	100571-0	Richland	WA
US Air Force Center for Radiation Dosimetry	100548-0	Brooks AFB	TX

ENVIRONMENTAL GROUP

Asbestos Fiber Analysis (PLM Test Method)

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
A & B Environmental Services, Inc.	101793-0	Houston	TX
A T Labs	101062-0	Youngstown	OH
A.E.S.L.	200303-0	Tempe	AZ
A.R.C. Laboratories, Inc.	101832-0	Grand Forks	ND
AAC Trinity, Inc.	101168-0	Farmington Hills	MI
ABM Environmental Consultants, Inc.	102015-0	Long Island City	NY
Accredited Environmental Technologies, Inc.	101051-0	Media	PA
Accredited Environmental Technologies, Inc.	200236-0	Leland	NC
ACM Environmental, Inc.	101977-0	South Bend	IN
Advanced Industrial Hygiene Services, Inc.	101006-0	Miami	FL
AGRA Earth and Environmental, Inc. - Env. Chemistry Laboratory	200357-0	Portland	OR
AGX, Inc.	101578-0	Cranberry Township	PA
Aires Consulting Group, Inc.	101014-0	Batavia	IL
AIResearch, Inc.	101868-0	Wauwatosa	WI
Airtek Environmental Corp.	102011-0	New York	NY
ALAC	200323-0	Bronx	NY
Allegheny Asbestos Analysis	101704-0	Carnegie	PA
Alpine Consulting, Inc.	102089-0	Colorado Springs	CO
AMA Analytical Services, Inc.	101143-0	Lanham	MD
Ambient Labs, Inc.	101618-0	New York	NY
American Asbestos Laboratories, Inc.	101775-0	Miami	FL
American Electric Power, Environmental Laboratory	102102-0	Columbus	OH
American Medical Laboratories, Inc.	101136-0	Chantilly	VA
Analytica Solutions, Inc.	101086-0	Broomfield	CO
Analytical Environmental Services International, Inc.	200051-0	Hato Rey	PR
Analytical Environmental Services, Inc.	102033-0	Atlanta	GA
Analytical Industries, Inc.	101855-0	Paducah	KY
Analytical Labs San Francisco, Inc.	101909-0	San Francisco	CA
Analyticalab	101727-0	Willow Springs	IL
Apex Research Laboratory	102118-0	Whitmore Lake	MI
Apollo Environmental, Inc.	101871-0	Gibsonton	FL
Applied Environmental, Inc.	101611-0	Reston	VA
ASBESTECH	101442-0	Carmichael	CA
Asbestos Analysis and Information Service, Inc.	101261-0	Four Oaks	NC
Asbestos Analytical	101771-0	Tucson	AZ
Asbestos Consulting & Testing (ACT)	101649-0	Lenexa	KS
Asbestos TEM Laboratories, Inc.	101891-0	Berkeley	CA
Asbestos TEM Laboratories, Inc.	200104-0	Sparks	NV
Assaigai Analytical Laboratories, Inc.	101457-0	Albuquerque	NM
ATC Associates Inc.	102071-0	Cincinnati	OH
ATC Associates Inc.	200250-0	Columbia	MD
ATC Associates Inc.	200290-0	Dallas	TX

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
ATC Associates, Inc.	101187-0	New York	NY
ATC Environmental, Inc.	102031-0	Englewood	CO
Athenica Environmental Services, Inc.	101958-0	Long Island City	NY
Aurora Consolidated Laboratories	101661-0	West Allis	WI
Austin Analytical Laboratory	200014-0	Austin	TX
Batta Laboratories, Inc.	101032-0	Newark	DE
Bay Area Air Quality Management District	102090-0	San Francisco	CA
Beling Consultants, Inc.	101356-0	Moline	IL
Bell Laboratories, Division Lucent Technologies, Inc.	101965-0	Murray Hill	NJ
Braun Intertec Corporation	101234-0	Minneapolis	MN
CAM Environmental Services, Inc.	200240-0	Pasadena	TX
CAMCO Lab	101803-0	Fontana	CA
Cape Environmental Management, Inc.	102111-0	Atlanta	GA
Carnow, Conibear & Associates Ltd.	101039-0	Chicago	IL
Carolina Environmental, Inc.	101768-0	Cary	NC
Chatfield Technical Consulting Limited	101103-0	Mississauga Ontario	CANADA
ChemScope, Inc.	101061-0	North Haven	CT
CHEMTEX Environmental Laboratory, Inc.	200025-0	Port Arthur	TX
Chopra-Lee, Inc.	200095-0	Grand Island	NY
City of Los Angeles Department of Water and Power	101111-0	Los Angeles	CA
Clark Seif Clark, Inc.	200324-0	Chatsworth	CA
Clayton Environmental Consultants	101106-0	Seattle	WA
Clayton Laboratory Services	101125-0	Kennesaw	GA
Comprehensive Health Services-Environmental Health PLM Laboratory	101759-0	Kennedy Space Center	FL
Con Edison - ChemLab	101558-0	Long Island City	NY
Concord Analysis, Inc.	101884-0	Chatsworth	CA
Continental Envirotech, Inc.	200080-0	Mesa	AZ
Converse Consultants MR, Inc.	102091-0	Reno	NV
Covino Environmental Associates, Inc.	101781-0	Woburn	MA
Craig Environmental Services, Inc.	200289-0	Mays Landing	NJ
Crisp Analytical Laboratory	200349-0	Carrollton	TX
Criterion Laboratories, Inc.	102046-0	Bensalem	PA
CT&E Environmental Services Inc.	200067-0	San Diego	CA
CTL Environmental Services	101216-0	Harbor City	CA
Dames & Moore, Inc.	101433-0	Salem	NH
DataChem Laboratories	101917-0	Cincinnati	OH
Davis & Floyd, Inc.	101410-0	Greenwood	SC
DCM Science Laboratory, Inc.	101258-0	Wheat Ridge	CO
Department of Environmental Health Industrial Hygiene Laboratory	101530-0	San Diego	CA
Design for Health, Inc.	101864-0	San Diego	CA
DHMH-Air Quality Laboratory	101523-0	Baltimore	MD
Dixon Information Inc.	101012-0	South Salt Lake	UT
DLZ Laboratories, Inc.	101060-0	Columbus	OH
Dolphin Environmental Consultants	102086-0	Stafford	TX
Dove Environmental Corporation	102053-0	Miami	FL
EA Group	101019-0	Mentor	OH
EAI, Inc.	102114-0	Jersey City	NJ

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Eastern Analytical Services, Inc.	101646-0	Elmsford	NY
EcoSystems Environmental, Inc.	101162-0	Carrollton	TX
ECS/Wagner Environmental	101064-0	Eugene	OR
EEC, Inc.	101088-0	Raleigh	NC
EMS Laboratories, Inc.	101218-0	Pasadena	CA
EMSL Analytical Mobile Laboratory	200344-0	Chicago	IL
EMSL Analytical, Inc.	101048-0	Westmont	NJ
EMSL Analytical, Inc.	101048-1	Atlanta	GA
EMSL Analytical, Inc.	101048-2	Piscataway	NJ
EMSL Analytical, Inc.	101048-3	San Mateo	CA
EMSL Analytical, Inc.	101048-4	Ann Arbor	MI
EMSL Analytical, Inc.	101048-9	New York	NY
EMSL Analytical, Inc.	101048-10	Carle Place	NY
EMSL Analytical, Inc.	101277-0	Fairfax	VA
EMSL Analytical, Inc.	102104-0	Greensboro	NC
EMSL Analytical, Inc.	102105-0	Warwick	RI
EMSL Analytical, Inc.	102106-0	Houston	TX
EMSL Analytical, Inc.	200019-0	Seattle	WA
EMSL Analytical, Inc.	200034-0	Dallas	TX
EMSL Analytical, Inc.	200056-0	Williamsville	NY
EMSL Analytical, Inc.	200188-0	Indianapolis	IN
EMSL Analytical, Inc.	200204-0	N. Miami Beach	FL
EMSL Analytical, Inc.	200247-0	Charlotte	NC
EMSL Analytical, Inc.	200293-0	Beltsville	MD
EMSL Analytical, Inc.	200310-0	Carlstadt	NJ
EMSL Analytical, Inc.	200333-0	Elmsford	NY
EMSL Analytical, Inc.	200375-0	Baton Rouge	LA
ENCORP	200013-0	El Segundo	CA
Enviro Techniques, Inc.	200024-0	Paterson	NJ
Enviro-Probe, Inc.	101222-0	Bronx	NY
EnviroHealth Technologies, Inc.	200374-0	St. Louis	MO
EnviroMed Services, Inc.	101514-0	New Haven	CT
Environmental Enterprise Group(EEG), Inc.	101587-0	Russellville	AR
Environmental Hazards Services, L.L.C.	101882-0	Richmond	VA
Environmental Health Laboratories	101506-0	Clayton	MO
Environmental Management Consultants, Inc.	101926-0	Scottsdale	AZ
Environmental Monitoring & Consulting Associates	101087-0	Somerville	NJ
Environmental Services International, Inc.	101306-0	St. Albans	WV
Environmental Testing and Monitoring Services, Inc.	200131-0	Virginia Beach	VA
Environmental Testing, Inc.	101848-0	Middletown	DE
EnvironMETeo Services Inc.	101807-0	Waipahu	HI
Envirotest, Inc.	101595-0	Houston	TX
ERI Consulting Engineers, Inc.	101232-0	Tyler	TX
ERT Testing Services	101295-0	Highland Park	MI
ESG Laboratories	102029-0	Indianapolis	IN
EssTek Ohio, Inc.	102093-0	Middleburg Heights	OH
Fiberquant, Inc.	101031-0	Phoenix	AZ
Fibertec, Inc.	101510-0	Holt	MI
Fluor Daniel Fernald, Inc., Analytical Laboratory Services	102010-0	Cincinnati	OH

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Forensic Analytical Specialties, Inc.	101459-0	Hayward	CA
Forensic Analytical Specialties, Inc.	101459-1	Rancho Domingues	CA
Froehling & Robertson, Inc.	102060-0	Richmond	VA
FRS Geotech, Inc.	102078-0	Denver	CO
GA Environmental Services, Inc.	101996-0	Eddystone	PA
Galson Laboratories	101375-0	East Syracuse	NY
Gelles Laboratories, Inc.	101170-0	Columbus	OH
Geo-Analytical Services, Inc.	102082-0	Atlanta	GA
GLE Associates, Inc.	102003-0	Tampa	FL
GPU Nuclear Chemistry/Materials Labs.	102064-0	Reading	PA
Guardian Laboratories	101399-0	Louisville	KY
Health Science Associates	101384-0	Los Alamitos	CA
Henderson/Longfellow Associates, Inc.	102077-0	St. Petersburg	FL
Hi-Tech Environmental and Laboratory Services	102013-0	Cypress	CA
HIH Laboratory, Inc.	101233-0	Webster	TX
Hillmann Environmental Company	101421-0	Union	NJ
Hub Testing Laboratory, Inc.	101045-0	Waltham	MA
Hygeia Laboratories Inc.	102116-0	Sierra Madre	CA
Hygeia Laboratories, Inc.	101011-0	Woburn	MA
Hygeia Laboratories, Inc.	102087-0	Marietta	GA
Hygeia Laboratories, Inc.	200335-0	Miami	FL
HYGENIX, INC.	101199-0	Stamford	CT
Hygieneering, Inc.	101997-0	Willowbrook	IL
Hygienetics Laboratory Services	101147-0	Boston	MA
Industrial Laboratory	102115-0	Portsmouth	VA
Institute for Environmental Assessment	101249-0	Brooklyn Park	MN
International Asbestos Testing Laboratory	101165-0	Mt. Laurel	NJ
Iowa Environmental Services, Inc.	101990-0	Des Moines	IA
ITEK Enviro Services, Inc.	200032-0	South San Francisco	CA
Jimmie Ann Bolton	101735-0	Austin	TX
JLC Environmental Consultants, Inc.	101953-0	New York	NY
JMS Environmental Associates, Ltd.	102012-0	Westmont	IL
KAM Consultants	102047-0	Long Island City	NY
Kellco Services, Inc.	101331-0	Hayward	CA
Kevco Services, Inc.	101941-0	Butler	PA
Kingston Environmental Laboratory	200041-0	Lee's Summit	MO
LA Testing	200232-0	S. Pasadena	CA
Labcorp Analytics Laboratory	101004-0	Richmond	VA
Larron Laboratory	101415-0	Cape Girardeau	MO
Law Engineering and Environmental Services, Inc.	101066-0	Birmingham	AL
Law Engineering and Environmental Services, Inc.	101152-0	Houston	TX
Law Engineering and Environmental Services, Inc.	101226-0	Charlotte	NC
Law Engineering and Environmental Services, Inc.	101515-0	Tampa	FL
Law Engineering and Environmental Services, Inc.	101515-1	Miami Lakes	FL
Law Engineering and Environmental Services, Inc.	101847-0	Sterling	VA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Law Engineering and Environmental Services, Inc.	101973-0	Dallas	TX
Law Engineering and Environmental Services, Inc.	102035-0	Phoenix	AZ
Legend Technical Services, Inc.	102081-0	St. Paul	MN
Lockheed Martin Utility Services, Inc.	101383-0	Piketon	OH
Loflin Environmental Services	102044-0	Houston	TX
Los Angeles Harbor Department Testing Laboratory	102020-0	Wilmington	CA
Los Angeles Unified School District	101505-0	Los Angeles	CA
Louisiana Department of Environmental Quality Microanalytical Lab	102000-0	Baton Rouge	LA
m.a.c. Paran Consulting Services, Inc.	102108-0	Amelia	OH
MACS Lab, Inc.	101948-0	Santa Clara	CA
Marine Chemist Service, Inc.	101425-0	Newport News	VA
Materials Analytical Services, Inc.	101235-0	Suwanee	GA
Maxim Technologies, Inc.	101091-0	Dallas	TX
Maxim Technologies, Inc.	101091-1	Houston	TX
Maxim Technologies, Inc.	101292-0	Billings	MT
McCall and Spero Environmental, Inc.	101895-0	Louisville	KY
McKee Environmental Health, Inc.	101135-0	Friendswood	TX
Metropolitan Environmental Testing Services dba METS Laboratories	200165-0	Waldorf	MD
Micro Air of Texas, Inc.	102008-0	Houston	TX
Micro Air, Inc.	101221-0	Indianapolis	IN
Micro Analytical Laboratories, Inc.	101151-0	Gainesville	FL
Micro Analytical Laboratories, Inc.	101872-0	Emeryville	CA
Micro Analytical Laboratories, Inc.	200054-0	San Francisco	CA
Micro Analytical, Inc.	101247-0	Milwaukee	WI
Microbac Laboratories, Inc.	101035-0	Erie	PA
Micron Environmental Labs	200294-0	Arcadia	CA
Microscopic Analysis, Inc.	101037-0	St. Louis	MO
Midwest Laboratories, Inc.	101894-0	Countryside	IL
Mountain Laboratories	101890-0	Spokane	WA
MRS., Analytical Laboratory, Inc.	102113-0	Louisville	KY
Muranaka Environmental Consultants, Inc.	102085-0	Honolulu	HI
Mystic Air Quality Consultants, Inc.	101282-0	Groton	CT
NASA-Lewis Research Center	200130-0	Cleveland	OH
NATEC International, Inc.	101155-0	Garden Grove	CA
National Analytical Laboratories, Inc.	102080-0	Roseville	CA
National Econ Corporation	102062-0	Tustin	CA
National Econ Corporation	200047-0	Memphis	TN
National Environmental Reference Laboratory	101593-0	Denver	CO
New York Testing Laboratories, Inc.	101332-0	Bay Shore	NY
Niche Analysis, Inc.	102057-0	Mount Vernon	NY
Northeast Test Consultants	101565-0	Westbrook	ME
Northern Testing Laboratories, Inc.	101463-0	Fairbanks	AK
Northwest Envirocon, Inc.	101869-0	Vancouver	WA
Nova Consulting Group, Inc.	101545-0	Chaska	MN
NVL Laboratories, Inc.	102063-0	Seattle	WA
NY Environmental & Analytical Labs, Inc.	101967-0	Port Washington	NY

(See 'How To Use This Directory' on page 7.)

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
O'Brien & Gere Laboratories, Inc.	101343-0	Syracuse	NY
Oak Ridge National Laboratory	200228-0	Oak Ridge	TN
OCCU-TEC, Inc.	102025-0	Kansas City	MO
Occupational Health Conservation, Inc.	102050-0	Jacksonville	FL
Oklahoma Dept. of Environmental Quality-State Environmental Lab	102112-0	Oklahoma City	OK
Omni Environmental, Inc.	102061-0	Austin	TX
PA DEP Bureau of Laboratories	101323-0	Harrisburg	PA
Pace Analytical	101265-0	Indianapolis	IN
Pacific Environmental Services, Inc.	101190-0	Herndon	VA
Pacific Rim Environmental, Inc.	101631-0	Tukwila	WA
Patriot Environmental Laboratory Services	200358-0	Garden Grove	CA
PBS Environmental Building Consultants, Inc.	101910-0	Portland	OR
Philip Analytical Services	101262-0	Reading	PA
Philip Environmental Services Corp.	101192-0	Columbia	IL
Pinchin Environmental Ltd.	101270-0	Mississauga Ontario	CANADA
PMK Group, Inc.	101301-0	Kenilworth	NJ
Precision Micro-Analysis, Inc.	101656-0	Sacramento	CA
Precision Testing Laboratories, Inc.	101580-0	Moore	OK
Prezant Associates, Inc.	101886-0	Seattle	WA
ProScience Analytical Services, Inc.	200090-0	Woburn	MA
PSI	101342-0	Lawrence	KS
PSI	101350-0	Pittsburgh	PA
PSI	101755-0	New York	NY
PSI	101970-0	Brea	CA
PSI, Inc.	101070-0	Farmingdale	NY
PSI, Inc.	200042-0	New Berlin	WI
Puget Sound Naval Shipyard	101539-0	Bremerton	WA
QuanTEM Laboratories, LLC	101959-0	Oklahoma City	OK
Quest MicroAnalytics, Inc.	200249-0	Dallas	TX
R. Robinson Analytical Services, Inc.	102041-0	Pensacola	FL
Rapid Environmental Management, Inc.	101974-0	Great Neck	NY
RCM Laboratories, Inc.	101853-0	Countryside	IL
Reservoirs Environmental Services, Inc.	101896-0	Denver	CO
Reservoirs Environmental Services, Inc.	101896-1	Houston	TX
RI Analytical Laboratories, Inc.	101440-0	Warwick	RI
RJ Lee Group, Inc.	101208-0	Monroeville	PA
RJ Lee Group, Inc.	101208-2	San Leandro	CA
RJ Lee Group, Inc.	101208-3	Manassas	VA
RJ Lee Group, Inc.	101208-5	Houston	TX
Roy F. Weston, Inc.	101254-0	Auburn	AL
S&ME, Inc.	102075-0	Charlotte	NC
Safe Environment of America	102021-0	Kent	WA
Schneider Laboratories, Inc.	101150-0	Richmond	VA
Scientific Laboratories, Inc.	101904-0	Midlothian	VA
Scientific Laboratories, Inc.	101904-1	New York	NY
SCILAB BOSTON, Inc.	102079-0	East Weymouth	MA
SCILAB California, Inc.	200346-0	Carson	CA
SEAS, Inc	101185-0	Blacksburg	VA
Severn Trent Laboratories (MA)	101005-0	N. Billerica	MA
Solar Environmental Services, Inc.	102006-0	Anchorage	AK

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
South Carolina Department of Health & Environmental Control	101572-0	Columbia	SC
South Coast Air Quality Management District	101567-0	Diamond Bar	CA
STAT Analysis Corporation	101202-0	Chicago	IL
State of Connecticut	101237-0	Hartford	CT
Steve Moody Micro Services, Inc.	102056-0	Carrollton	TX
Sun City Analytical, Inc.	101870-0	El Paso	TX
Taylor Environmental Group, Inc.	102101-0	Floral Park	NY
TC Analytics, Inc.	101672-0	Norfolk	VA
TEC-AN, Inc.	200325-0	Oklahoma City	OK
TEM, Incorporated	101130-0	Glen Ellyn	IL
Testing Mechanics Corp.	102001-0	Seaford	NY
Testwell Laboratories, Inc./Testwell Industries, Inc.	200083-0	Ossining	NY
The Scott Lawson Group, Ltd.	101228-0	Concord	NH
TolTest, Inc.	101594-0	Toledo	OH
TRC Environmental Corporation	101424-0	Windsor	CT
Tremco, Inc. - Roofing Division, An RPM Company	101188-0	Beachwood	OH
Triad Environmental Consulting, Inc.	102073-0	Huntington	WV
U.S. Army Center for Health Promotion and Preventive Medicine	200044-0	Aberdeen Proving Ground	MD
U.S. EPA - National Enforcement Investigations Center	101703-0	Denver	CO
United Analytical Services, Inc.	101732-0	Hillside	IL
University (State) Hygienic Laboratory	101288-0	Iowa City	IA
University of Alabama Asbestos Laboratory	102005-0	Tuscaloosa	AL
Volz Environmental Services, Inc.	101269-0	Pittsburgh	PA
Waste Management Federal Services of Hanford, Inc.	101058-0	Richland	WA
Water, Earth Solutions & Technologies, Inc.	102043-0	Dallas	TX
Wausau Insurance Companies	101079-0	Wausau	WI
Western Analytical Laboratory	200037-0	Burbank	CA
White Environmental Consultants Inc.	200124-0	Anchorage	AK
White Environmental Consultants, Inc.	200350-0	Honolulu	HI
Wisconsin Occupational Health Laboratory	101109-0	Madison	WI
WKP Laboratories, Inc.	101950-0	Ossining	NY
Wonder Makers Environmental, Inc.	102065-0	Kalamazoo	MI

Asbestos Fiber Analysis (TEM Test Method)

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Aires Consulting Group, Inc.	101014-0	Batavia	IL
AMA Analytical Services, Inc.	101143-0	Lanham	MD
Analytica Solutions, Inc.	101086-0	Broomfield	CO
ASBESTECH	101442-0	Carmichael	CA
Asbestos TEM Laboratories, Inc.	101891-0	Berkeley	CA
ATC Associates, Inc.	101187-0	New York	NY
Batta Laboratories, Inc.	101032-0	Newark	DE
Braun Intertec Corporation	101234-0	Minneapolis	MN
Carnow, Conibear & Associates Ltd.	101039-0	Chicago	IL
Chopra-Lee, Inc.	200095-0	Grand Island	NY
Clayton Laboratory Services	101125-0	Kennesaw	GA
Crisp Analytical Laboratory	200349-0	Carrollton	TX
DataChem Laboratories	101917-0	Cincinnati	OH

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LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
E. M. Analytical, Inc.	101902-0	Dania	FL
Eastern Analytical Services, Inc.	101646-0	Elmsford	NY
EMS Laboratories, Inc.	101218-0	Pasadena	CA
EMSL Analytical Mobile Laboratory	200344-0	Chicago	IL
EMSL Analytical, Inc.	101048-0	Westmont	NJ
EMSL Analytical, Inc.	101048-1	Atlanta	GA
EMSL Analytical, Inc.	101048-2	Piscataway	NJ
EMSL Analytical, Inc.	101048-3	San Mateo	CA
EMSL Analytical, Inc.	101048-4	Ann Arbor	MI
EMSL Analytical, Inc.	101048-9	New York	NY
EMSL Analytical, Inc.	101048-10	Carle Place	NY
EMSL Analytical, Inc.	101277-0	Fairfax	VA
EMSL Analytical, Inc.	102104-0	Greensboro	NC
EMSL Analytical, Inc.	102106-0	Houston	TX
EMSL Analytical, Inc.	200019-0	Seattle	WA
EMSL Analytical, Inc.	200034-0	Dallas	TX
EMSL Analytical, Inc.	200056-0	Williamsville	NY
EMSL Analytical, Inc.	200188-0	Indianapolis	IN
EMSL Analytical, Inc.	200204-0	N. Miami Beach	FL
EMSL Analytical, Inc.	200293-0	Beltsville	MD
EMSL Analytical, Inc.	200310-0	Carlstadt	NJ
EMSL Analytical, Inc.	200333-0	Elmsford	NY
EMSL Analytical, Inc.	200375-0	Baton Rouge	LA
Environmental Testing Laboratories, Inc.	101937-0	Farmingdale	NY
Fiberquant, Inc.	101031-0	Phoenix	AZ
Forensic Analytical Specialties, Inc.	101459-0	Hayward	CA
Gelles Laboratories, Inc.	101170-0	Columbus	OH
Geo-Analytical Services, Inc.	102082-0	Atlanta	GA
Hygeia Laboratories Inc.	102116-0	Sierra Madre	CA
Hygeia Laboratories, Inc.	101011-0	Woburn	MA
Hygeia Laboratories, Inc.	200335-0	Miami	FL
Hygienetics Laboratory Services	101147-0	Boston	MA
International Asbestos Testing Laboratory	101165-0	Mt. Laurel	NJ
JMS Environmental Associates, Ltd.	102012-0	Westmont	IL
KAM Consultants	102047-0	Long Island City	NY
LA Testing	200232-0	S. Pasadena	CA
Lab/Cor, Inc.	101920-0	Seattle	WA
Los Angeles Unified School District	101505-0	Los Angeles	CA
MACS Lab, Inc.	101948-0	Santa Clara	CA
Materials Analytical Services, Inc.	101235-0	Suwanee	GA
Maxim Technologies, Inc.	101091-0	Dallas	TX
McCall and Spero Environmental, Inc.	101895-0	Louisville	KY
Micro Analytical Laboratories, Inc.	101151-0	Gainesville	FL
Micro Analytical Laboratories, Inc.	101872-0	Emeryville	CA
Midwest Laboratories, Inc.	101894-0	Countryside	IL
New York Testing Laboratories, Inc.	101332-0	Bay Shore	NY
O'Brien & Gere Laboratories, Inc.	101343-0	Syracuse	NY
Pace Analytical	101265-0	Indianapolis	IN
Philip Analytical Services	101262-0	Reading	PA
ProScience Analytical Services, Inc.	200090-0	Woburn	MA
PSI	101350-0	Pittsburgh	PA
QuanTEM Laboratories, LLC	101959-0	Oklahoma City	OK

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LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Reservoirs Environmental Services, Inc.	101896-0	Denver	CO
Reservoirs Environmental Services, Inc.	101896-1	Houston	TX
RJ Lee Group, Inc.	101208-0	Monroeville	PA
RJ Lee Group, Inc.	101208-2	San Leandro	CA
RJ Lee Group, Inc.	101208-3	Manassas	VA
RJ Lee Group, Inc.	101208-5	Houston	TX
Scientific Laboratories, Inc.	101904-0	Midlothian	VA
Scientific Laboratories, Inc.	101904-1	New York	NY
SCILAB BOSTON, Inc.	102079-0	East Weymouth	MA
SCILAB California, Inc.	200346-0	Carson	CA
Severn Trent Laboratories (MA)	101005-0	N. Billerica	MA
STAT Analysis Corporation	101202-0	Chicago	IL
Steve Moody Micro Services, Inc.	102056-0	Carrollton	TX
TEM, Incorporated	101130-0	Glen Ellyn	IL
Testwell Laboratories, Inc./Testwell Industries, Inc.	200083-0	Ossining	NY
University (State) Hygienic Laboratory	101288-0	Iowa City	IA

FASTENER & METALS GROUP

Fasteners & Metals

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
3V Fasteners Co. Inc. Testing Laboratory	200264-0	Corona	CA
Acominas - Analysis and Testing Laboratory	200185-0	Ouro Branco MG	BRAZIL
Aerospace NYLOK - a subsidiary of the NYLOK Fastener Corporation	200271-0	Hawthorne	NJ
Aerospace Rivet Manufacturers Corp.	200266-0	Santa Fe Springs	CA
Alloy & Stainless Testing	200353-0	Virginia Beach	VA
Aoyama Fastener Laboratory	200213-0	Niwa-gun, Aichi Prefecture	JAPAN
Arden Fasteners	200187-0	Addison	IL
Asakawa Screw Co., Ltd.	200197-0	Yokohama	JAPAN
Asakawa Screw Co., Ltd. Kawawa Factory	200257-0	Yokohama	JAPAN
BarTech Inc. - Chemical Laboratory	200148-0	Johnstown	PA
BCAG Fastener Quality Test Lab Everett Site	200292-0	Seattle	WA
Belgo-Mineira Chemical Laboratory	200196-0	35.930-900 Joao Monlevade	BRAZIL
Binder Metal Products, Inc.	200321-0	Gardena	CA
Bodycote Industrial Testing, Inc.	101072-0	St. Louis	MO
California Screw Products	200183-0	Paramount	CA
Casey Products, Inc.	200278-0	Lisle	IL
CBS Fasteners, Inc.	200253-0	Anaheim	CA
Dexter Fastener Technologies, Inc.	200144-0	Dexter	MI
Durkee Testing Laboratories, Inc.	200178-0	Paramount	CA
Fabristeel Products Inc.	200329-0	Taylor	MI
Fastener Innovation Technology, Inc.	200179-0	Gardena	CA
Federal Manufacturing Corp.	200279-0	Chatsworth	CA
Fong Prean Industrial Co., Ltd.	200288-0	Kaohsiung Hsien	TAIWAN
Fuji Buhin Kogyo Kabushiki Kaisha	200203-0	Ohta Gunma	JAPAN
Fuji Component Parts USA, Inc.	200180-0	Indianapolis	IN
Fuserashi Gunma	200173-0	Gunma-Ken	JAPAN
Fwu Kuang Enterprises Co., Ltd.	200286-0	Tainan Hsien	TAIWAN
Hadd-Co Inspection Lab	200326-0	Torrance	CA
Incotec Laboratory	200339-0	Mojave	CA
Indiana Automotive Fasteners, Inc.	200150-0	Greenfield	IN
Ingersoll Fasteners	200208-0	Ingersoll Ontario	CANADA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Ivaco Rolling Mills, Chemistry Laboratory	200143-0	L'Orignal Ontario	CANADA
J.W. Mfg. DBA Van Petty Mfg.	200225-0	Newbury Park	CA
Kobelco Research Institute, Inc. Stock Company	200169-0	Kobe	JAPAN
Korea Testing & Research Inst. for Chemical Industry-Inchon Off.	200177-0	Inchon	KOREA
Kyowa Kogyosyo Co., Ltd. Test Laboratory	200274-0	Komatsu City, Ishikawa	JAPAN
Leland-Powell Fasteners, Inc. Fastener Testing Laboratory	200171-0	Martin	TN
M&M Manufacturing Corportation	200356-0	Chino	CA
MAC Fasteners, Inc.	200141-0	Ottawa	KS
MacLean Fasteners - QC Laboratory	200153-0	Mundelein	IL
Meidoh Laboratory	200239-0	Toyota, Aichi	JAPAN
Metallic Material Laboratory in Toyota Motor Co.	200223-0	Toyota city Aichi	JAPAN
Minebea Co., Ltd. Fujisawa Manufacturing Unit	200229-0	Fujisawa, Kanagawa	JAPAN
Modern Plating Corporation	200320-0	Freeport	IL
MQS Inspection, Inc. Magnetic Particle & Liquid Penetrant Exam.	200314-0	Santa Fe Springs	CA
Multifastener Laboratory	200267-0	Taylor	MI
Northwestern Steel and Wire Company	200224-0	Sterling	IL
NOVA Machine Products	200202-0	Middleburg Heights	OH
NSS Technologies	200184-0	Plymouth	MI
NYLOK Fastener Corporation	200272-0	Anaheim	CA
NYLOK Fastener Corporation	200273-0	Macomb	MI
NYLOK Fastener Corporation - Chicago Testing Laboratory	200275-0	Lincolnwood	IL
O & K Company Limited, Osaka Test Center	200166-0	Osaka-Shi	JAPAN
Okai Iron Works Co., Ltd.	200299-0	Izumisano Osaka	JAPAN
Okawa Laboratory	200296-0	Naka-gun, Ibaraki-ken	JAPAN
Owari Precise Products Co., Ltd.	200227-0	Nagoya	JAPAN
PB Fasteners	200139-0	Gardena	CA
Portland Bolt and Manufacturing Company, Inc. Testing Laboratory	200168-0	Portland	OR
Pratt & Whitney Materials Control Laboratory	200336-0	East Hartford	CT
Prospect Testing Labs, Inc.	200328-0	Des Plaines	IL
Prottsa, S.A. de C.V.	200261-0	Mexico City	MEXICO
Republic Fastener Manufacturing	200195-0	Newbury Park	CA
Rightway Fasteners, Inc.	200210-0	Columbus	IN
Robbins Manufacturing Co., Inc.	200161-0	Fall River	MA
Rockford Bolt & Steel Co.	200255-0	Rockford	IL
Rocknel Fastener Inc.	200307-0	Rockford	IL
San Shing Hardware Works Co., Ltd. Test Laboratory	200158-0	Tainan	TAIWAN
Sannohashi Corporation	200205-0	Yashioshi, Saitama-ken	JAPAN
Saturn Fasteners, Inc.	200327-0	Burbank	CA
SNB Laboratory	200308-0	Cumberland	RI
SPS Technologies Aerospace Product Division	200298-0	Santa Ana	CA
SPS Technologies; Aerospace Fastener Group	200164-0	Jenkintown	PA

(See 'How To Use This Directory' on page 7.)

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Sugiura Seisakusho Co., Ltd.	200226-0	Nishio Aichi	JAPAN
Sumitomo Metal Technology, Inc. Kokura Division	200215-0	Kitakyushu	JAPAN
Sundram Fasteners Limited (Inhouse test laboratory)	200212-0	Chennai (Madras), Tamil, Nadh	INDIA
Sundram Fasteners Limited Chemical Testing Laboratory	200256-0	Andhra Pradesh	INDIA
Super Cheng Industrial Testing Laboratory	200280-0	Kaohsiung, Kangshan	TAIWAN
The Monadnock Company	200268-0	City of Industry	CA
The Perryman Company	200128-0	Houston	PA
Topura Co., Ltd.	200181-0	Hadano Kanagawa	JAPAN
Topura Co., Ltd. Osaka	200242-0	Katano, Osaka	JAPAN
Topura Co., Ltd. Tokai	200243-0	Ogasagun,Shizuoka	JAPAN
TWN Fastener, Inc.	200194-0	Bowling Green	KY
United Steel and Fasteners Inc.	200341-0	Itasca	IL
Vermont Fasteners Manufacturing	200254-0	Swanton	VT
Vulcan Rivet and Bolt Corporation	200277-0	Birmingham	AL
Walker Bolt Manufacturing Co.	200126-0	Houston	TX
Wilson-Garner Company	200136-0	Harrison Township	MI
Wolverine Plating Corp.	200230-0	Roseville	MI
Yamaha Motor Metal Testing Laboratory Fasteners and Metals	200276-0	Iwata Shizuoka	JAPAN

PRODUCT TESTING GROUP

Acoustical Testing Services

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Acoustic Systems Acoustical Research Facility	100286-0	Austin	TX
Acaro Company, E·A·RCAL Acoustical Laboratory	100374-0	Indianapolis	IN
Architectural Testing Inc.	200361-0	York	PA
Armstrong Acoustic Labs, Armstrong World Ind., Inc. Innov. Center	100228-0	Lancaster	PA
Celotex Technical Center	100417-0	St. Petersburg	FL
Dell Regulatory Test Laboratories	200052-0	Round Rock	TX
Hufcor Laboratory	100239-0	Janesville	WI
IBM Hudson Valley Acoustics Laboratory	100323-0	Poughkeepsie	NY
Industrial Acoustics Company, Inc., Aero-Acoustics Laboratory	100404-0	Bronx	NY
Johns Manville Technical Center	100425-0	Littleton	CO
Maxim Technologies, Inc.	200046-0	St. Paul	MN
Michael & Associates	100427-0	State College	PA
NGC Testing Services, National Gypsum Research Center	200291-0	Buffalo	NY
Orfield Laboratories, Inc.	200248-0	Minneapolis	MN
Owens Corning Testing Systems - Product Testing Laboratory	100109-0	Granville	OH
Ricoh Company LTD. Ohmori Acoustics Test Site	200345-0	Tokyo	JAPAN
Riverbank Acoustical Laboratories	100227-0	Geneva	IL
USG Research-Systems Evaluation Laboratory	200132-0	Libertyville	IL
Vibro-Acoustics Laboratory	100424-0	Scarborough Ontario	CANADA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Western Electro-Acoustic Lab., Inc.	100256-0	Santa Monica	CA

Carpet and Carpet Cushion

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
American Carpet Laboratories, Inc.	100139-0	Ringgold	GA
Beaulieu of America - Carpet Testing Lab	100190-0	Dalton	GA
Bentley Testing Laboratory	100288-0	City of Industry	CA
Commercial Testing Company	100120-0	Dalton	GA
Hollytex Carpet Mills, Inc.	100247-0	Anadarko	OK
Independent Textile Testing Service, Inc.	100166-0	Dalton	GA
Mohawk Industries, Inc.- Lyerly Plant	100156-0	Lyerly	GA
Professional Testing Laboratory, Inc.	100297-0	Dalton	GA
Queen Carpet Test Laboratory	100429-0	Dalton	GA
Shaw Industries, Inc., Central Laboratory Operations	100193-0	Dalton	GA
TSi, Testing Services, Inc.	100108-0	Dalton	GA
Vartest Laboratories, Inc.	200027-0	New York	NY
World Carpets, Inc.	100197-0	Dalton	GA

Commercial Products Testing

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Canadian Standards Association	100322-0	Etobicoke Ontario	CANADA
D/L Laboratories	100252-0	New York	NY
Dodge-Regupol, Inc. Laboratory	200030-0	Lancaster	PA
MacMillan Bloedel Packaging, Inc., Combined Board Test Lab	100259-0	Pine Hill	AL
NAHB Research Center, Inc.	100104-0	Upper Marlboro	MD
SGS U.S. Testing Company, Inc.	100416-0	Tulsa	OK
Willamette Industries, Inc. West Coast Development Lab	200045-0	Wilsonville	OR

Construction Materials Testing

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
American Testing Laboratories, Inc.	100146-0	Lancaster	PA
ASC geoscience, inc.	200316-0	Lakeland	FL
City of San Jose, Materials Testing Laboratory	100325-0	San Jose	CA
Eastern Materials Testing Lab a division of Jaworski Geotech	100315-0	New Britain	CT
Fairfield Testing Laboratory, Inc.	100317-0	Stamford	CT
Fairway Testing Company, Inc.	100340-0	Stony Point	NY
Independent Materials Testing Laboratories, Inc.	100316-0	Plainville	CT
Inland Foundation Engineering, Inc.	100406-0	San Jacinto	CA
Materials Testing, Inc.	100320-0	Milford	CT
PSI, Inc.	100319-0	North Haven	CT
Special Testing Laboratories, Inc.	100308-0	Bethel	CT
STS Consultants, Ltd.	100191-0	Vernon Hills	IL
Test-Con Incorporated	200018-0	Danbury	CT
Testwell Laboratories, Inc./Testwell Industries, Inc.	200083-0	Ossining	NY
Tri-State Materials Testing Lab, Inc.	200010-0	Newington	CT
W.R. Grace & Co.	200258-0	Cambridge	MA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Efficiency of Electric Motors			
Advanced Energy, Industrial Energy Laboratory	200081-0	Raleigh	NC
GE Owensboro Test Laboratory	200305-0	Owensboro	KY
MagneTek (Lexington) Engineering Laboratory	200053-0	Lexington	TN
Marathon Electric - Wausau Engineering Lab.	200134-0	Wausau	WI
Oak Ridge National Laboratory Electric Machinery Center	200244-0	Oak Ridge	TN
Small IAC Test Laboratory	200287-0	Peterborough	CANADA
Toshiba/Houston Test Laboratory	200088-0	Houston	TX
Energy Efficient Lighting Products			
Cooper Lighting - Metalux Research Laboratories	200050-0	Americus	GA
Daybrite Lighting (Genlyte Thomas Group) Photometric Laboratory	200016-0	Tupelo	MS
Duro-Test Corporation	200283-0	Clifton	NJ
GE Lighting- Engineering Support - NA	100398-0	Cleveland	OH
Hubbell Lighting Photometric Laboratory	200020-0	Christiansburg	VA
Intertek Testing Services NA Inc.	100402-0	Cortland	NY
Lithonia Testing Laboratories	200007-0	Conyers	GA
Osram Sylvania Inc., Test & Measurements Laboratory	100403-0	Beverly	MA
Philips Lighting Corporate Calibration & Standards Laboratory	100399-0	Fairmont	WV
Thomas Lighting Accent Division Photometric Laboratory	200155-0	Los Angeles	CA
Thermal Insulation Materials			
Celotex Technical Center	100417-0	St. Petersburg	FL
Dow Chemical N. America Foam Products Research, Prod. Perf. Lab.	100103-0	Midland	MI
Flexible Products Company	100210-0	Joliet	IL
Geoscience Ltd.	100142-0	San Diego	CA
Holometrix - Micromet	100113-0	Bedford	MA
Intertek Testing Services NA Inc.	100402-0	Cortland	NY
Intertek Testing Services NA Inc.	200031-0	Middleton	WI
Johns Manville Technical Center	100425-0	Littleton	CO
Knauf Fiber Glass Research Laboratory	100248-0	Shelbyville	IN
Levecque Technical Center	100101-0	Blue Bell	PA
Maxim Technologies, Inc.	200046-0	St. Paul	MN
NAHB Research Center, Inc.	100104-0	Upper Marlboro	MD
Owens Corning Testing Systems - Product Testing Laboratory	100109-0	Granville	OH
R & D Services, Inc.	200265-0	Cookeville	TN
Resources, Applications, Designs & Control, Inc. (RADCO)	100261-0	Long Beach	CA
SGS U.S. Testing Company, Inc.	100416-0	Tulsa	OK
St. of California, Bur. of Home Furnishings & Thermal Insulation	100251-0	North Highlands	CA
Underwriters Laboratories Inc.	100414-0	Northbrook	IL

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY
Wood Based Products			
APA - The Engineered Wood Association Research Center	100423-0	Tacoma	WA
Composite Panel Association (CPA)	100418-0	Gaithersburg	MD
PFS Corporation	100421-0	Madison	WI
Professional Service Industries, Inc., Pittsburgh Test. Lab. Div.	100430-0	Eugene	OR
Timberco, Inc.- dba TECO	100420-0	Eugene	OR

C

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
AK				
Northern Testing Laboratories, Inc.	101463-0	Fairbanks	AK	PLM
Solar Environmental Services, Inc.	102006-0	Anchorage	AK	PLM
White Environmental Consultants Inc.	200124-0	Anchorage	AK	PLM
AL				
Law Engineering and Environmental Services, Inc.	101066-0	Birmingham	AL	PLM
MacMillan Bloedel Packaging, Inc., Combined Board Test Lab	100259-0	Pine Hill	AL	Commercial
Roy F. Weston, Inc.	101254-0	Auburn	AL	PLM
U.S. Army Primary Standards Laboratory	105004-0	Redstone Arsenal	AL	Calibration
U.S. Army Radiation Standards & Dosimetry Laboratory	100539-0	Redstone Arsenal	AL	Dosimetry
University of Alabama Asbestos Laboratory	102005-0	Tuscaloosa	AL	PLM
Vulcan Rivet and Bolt Corporation	200277-0	Birmingham	AL	Fasteners
AR				
Environmental Enterprise Group(EEG), Inc.	101587-0	Russellville	AR	PLM
AZ				
A.E.S.L.	200303-0	Tempe	AZ	PLM
Arizona Public Service Co., Palo Verde Nuclear Generating Station	100536-0	Tonopah	AZ	Dosimetry
Asbestos Analytical	101771-0	Tucson	AZ	PLM
Continental Envirotech, Inc.	200080-0	Mesa	AZ	PLM
Environmental Management Consultants, Inc.	101926-0	Scottsdale	AZ	PLM
Fiberquant, Inc.	101031-0	Phoenix	AZ	PLM
Fiberquant, Inc.	101031-0	Phoenix	AZ	TEM
Law Engineering and Environmental Services, Inc.	102035-0	Phoenix	AZ	PLM
Motorola SSTG EMC/TEMPEST Laboratory	100405-0	Scottsdale	AZ	FCC
Motorola SSTG EMC/TEMPEST Laboratory	100405-0	Scottsdale	AZ	MIL-STD-462
CA				
3V Fasteners Co. Inc. Testing Laboratory	200264-0	Corona	CA	Fasteners
Aerospace Rivet Manufacturers Corp.	200266-0	Santa Fe Springs	CA	Fasteners
Analytical Labs San Francisco, Inc.	101909-0	San Francisco	CA	PLM
Apple Computer, Inc., EMC Compliance Laboratory	200071-0	Cupertino	CA	FCC
ASBESTECH	101442-0	Carmichael	CA	PLM
ASBESTECH	101442-0	Carmichael	CA	TEM
Asbestos TEM Laboratories, Inc.	101891-0	Berkeley	CA	PLM
Asbestos TEM Laboratories, Inc.	101891-0	Berkeley	CA	TEM
AST Research, Inc. EMC Lab.	200135-0	Irvine	CA	FCC
Bay Area Air Quality Management District	102090-0	San Francisco	CA	PLM
Bay Area Compliance Laboratory, Corp.	200167-0	Sunnyvale	CA	FCC
Bentley Testing Laboratory	100288-0	City of Industry	CA	Carpet
Binder Metal Products, Inc.	200321-0	Gardena	CA	Fasteners
California Screw Products	200183-0	Paramount	CA	Fasteners
CAMCO Lab	101803-0	Fontana	CA	PLM
CBS Fasteners, Inc.	200253-0	Anaheim	CA	Fasteners

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
Cisco Systems, Inc.	200114-0	San Jose	CA	FCC
City of Los Angeles Department of Water and Power	101111-0	Los Angeles	CA	PLM
City of San Jose, Materials Testing Laboratory	100325-0	San Jose	CA	Construction
Clark Seif Clark, Inc.	200324-0	Chatsworth	CA	PLM
Compatible Electronics, Inc.	200063-0	Agoura	CA	FCC
Compliance Eng. Svces, Inc., Compliance Certification Services	200065-0	Sunnyvale	CA	FCC
Compliance Engineering Services, Inc. - Taiwan	200064-0	Sunnyvale	CA	FCC
Concord Analysis, Inc.	101884-0	Chatsworth	CA	PLM
CT&E Environmental Services Inc.	200067-0	San Diego	CA	PLM
CTL Environmental Services	101216-0	Harbor City	CA	PLM
Department of Environmental Health Industrial Hygiene Laboratory	101530-0	San Diego	CA	PLM
Design for Health, Inc.	101864-0	San Diego	CA	PLM
Durkee Testing Laboratories, Inc.	200178-0	Paramount	CA	Fasteners
Electro Magnetic Test, Inc.	200147-0	Mountain View	CA	FCC
Electronic Compliance Laboratories, Inc.	200089-0	Sunnyvale	CA	FCC
Elliott Laboratories, Inc.	200069-0	Sunnyvale	CA	FCC
EMC Compliance Mgmt Group, dba Turntech Scientific & Instr., Inc.	200068-0	Mountain View	CA	FCC
EMCE Engineering, Inc.	200092-0	Fremont	CA	FCC
EMS Laboratories, Inc.	101218-0	Pasadena	CA	PLM
EMS Laboratories, Inc.	101218-0	Pasadena	CA	TEM
EMSL Analytical, Inc.	101048-3	San Mateo	CA	PLM
EMSL Analytical, Inc.	101048-3	San Mateo	CA	TEM
ENCORP	200013-0	El Segundo	CA	PLM
Fastener Innovation Technology, Inc.	200179-0	Gardena	CA	Fasteners
Federal Manufacturing Corp.	200279-0	Chatsworth	CA	Fasteners
Forensic Analytical Specialties, Inc.	101459-0	Hayward	CA	PLM
Forensic Analytical Specialties, Inc.	101459-0	Hayward	CA	TEM
Forensic Analytical Specialties, Inc.	101459-1	Rancho Domingues	CA	PLM
Garwood Laboratories, Inc.	200119-0	Placentia	CA	FCC
Geoscience Ltd.	100142-0	San Diego	CA	Thermal Insl.
Hadd-Co Inspection Lab	200326-0	Torrance	CA	Fasteners
Health Science Associates	101384-0	Los Alamitos	CA	PLM
Hewlett Packard, Product Test Lab, San Diego	200138-0	San Diego	CA	FCC
Hi-Tech Environmental and Laboratory Services	102013-0	Cypress	CA	PLM
Hygeia Laboratories Inc.	102116-0	Sierra Madre	CA	PLM
Hygeia Laboratories Inc.	102116-0	Sierra Madre	CA	TEM
ICN Dosimetry Service, Div. of ICN Biomedicals, Inc.	100555-0	Costa Mesa	CA	Dosimetry
Incotcc Laboratory	200339-0	Mojave	CA	Fasteners
InfoGard Laboratories, Inc.	100432-0	San Luis Obispo	CA	Cryptographic
Inland Foundation Engineering, Inc.	100406-0	San Jacinto	CA	Construction
Intertek Testing Services	200201-0	Menlo Park	CA	FCC
Intertek Testing Services NA Inc.	200297-0	Laguna Niguel	CA	FCC
ITEK Enviro Services, Inc.	200032-0	South San Francisco	CA	PLM

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
J.W. Mfg. DBA Van Petty Mfg.	200225-0	Newbury Park	CA	Fasteners
Kellco Services, Inc.	101331-0	Hayward	CA	PLM
LA Testing	200232-0	S. Pasadena	CA	PLM
LA Testing	200232-0	S. Pasadena	CA	TEM
Lockheed Martin Technical Operations	105017-0	Sunnyvale	CA	Calibration
Los Angeles Harbor Department Testing Laboratory	102020-0	Wilmington	CA	PLM
Los Angeles Unified School District	101505-0	Los Angeles	CA	PLM
Los Angeles Unified School District	101505-0	Los Angeles	CA	TEM
M&M Manufacturing Corportation	200356-0	Chino	CA	Fasteners
MACS Lab, Inc.	101948-0	Santa Clara	CA	PLM
MACS Lab, Inc.	101948-0	Santa Clara	CA	TEM
Micro Analytical Laboratories, Inc.	101872-0	Emeryville	CA	PLM
Micro Analytical Laboratories, Inc.	101872-0	Emeryville	CA	TEM
Micro Analytical Laboratories, Inc.	200054-0	San Francisco	CA	PLM
Micron Environmental Labs	200294-0	Arcadia	CA	PLM
MQS Inspection, Inc. Magnetic Particle & Liquid Penetrant Exam.	200314-0	Santa Fe Springs	CA	Fasteners
NATEC International, Inc.	101155-0	Garden Grove	CA	PLM
National Analytical Laboratories, Inc.	102080-0	Roseville	CA	PLM
National Econ Corporation	102062-0	Tustin	CA	PLM
NAWCWPNS EMI Lab, China Lake/Pt. Mugu, CA	200199-0	China Lake	CA	MIL-STD-462
Nemko EESI, Inc.	200116-0	San Diego	CA	FCC
Northern Telecom Inc.	100411-0	Santa Clara	CA	FCC
NYLOK Fastener Corporation	200272-0	Anaheim	CA	Fasteners
Pacific Gas & Electric Company, Diablo Canyon Nuclear Power Plant	100537-0	Avila Beach	CA	Dosimetry
Patriot Environmental Laboratory Services	200358-0	Garden Grove	CA	PLM
PB Fasteners	200139-0	Gardena	CA	Fasteners
PDE Laboratories	200082-0	San Clemente	CA	FCC
Precision Micro-Analysis, Inc.	101656-0	Sacramento	CA	PLM
PSI	101970-0	Brea	CA	PLM
Radiation Detection Company	100512-0	Sunnyvale	CA	Dosimetry
Radiation Technology, Inc.	200086-0	San Jose	CA	FCC
Republic Fastener Manufacturing	200195-0	Newbury Park	CA	Fasteners
Resources, Applications, Designs & Control, Inc. (RADCO)	100261-0	Long Beach	CA	Thermal Insl.
RJ Lee Group, Inc.	101208-2	San Leandro	CA	PLM
RJ Lee Group, Inc.	101208-2	San Leandro	CA	TEM
Rockford Engineering Services, Inc.	200172-0	Sunol	CA	FCC
Saturn Fasteners, Inc.	200327-0	Burbank	CA	Fasteners
SCILAB California, Inc.	200346-0	Carson	CA	PLM
SCILAB California, Inc.	200346-0	Carson	CA	TEM
SGI EMC Laboratories	200233-0	Mountain View	CA	FCC
Sony Electronics Inc. Product Quality Division EMC Group	200312-0	San Diego	CA	FCC
South Coast Air Quality Management District	101567-0	Diamond Bar	CA	PLM
Southern California Edison	100506-0	San Clemente	CA	Dosimetry
Southern California Edison Company	105014-0	Westminster	CA	Calibration
SPS Technologies Aerospace Product Division	200298-0	Santa Ana	CA	Fasteners

(See 'How To Use This Directory' on page 7.)

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
St. of California, Bur. of Home Furnishings & Thermal Insulation	100251-0	North Highlands	CA	Thermal Insl.
Sun Microsystems, Inc. EMC Testing	200363-0	Palo Alto	CA	FCC
The Monadnock Company	200268-0	City of Industry	CA	Fasteners
Thomas Lighting Accent Division Photometric Laboratory	200155-0	Los Angeles	CA	Lighting
TUV Product Service, Inc.	100268-0	San Diego	CA	FCC
TUV Product Service, Inc.	100268-0	San Diego	CA	MIL-STD-462
Underwriters Laboratories	200252-0	Santa Clara	CA	FCC
Universal Compliance Laboratories	200117-0	San Jose	CA	FCC
Western Analytical Laboratory	200037-0	Burbank	CA	PLM
Western Electro-Acoustic Lab., Inc.	100256-0	Santa Monica	CA	Acoustics

CO

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
Alpine Consulting, Inc.	102089-0	Colorado Springs	CO	PLM
Analytica Solutions, Inc.	101086-0	Broomfield	CO	PLM
Analytica Solutions, Inc.	101086-0	Broomfield	CO	TEM
ATC Environmental, Inc.	102031-0	Englewood	CO	PLM
Compaq Computer Corp. EMC Test Facility	200078-0	Colorado Springs	CO	FCC
Criterion Technology	100396-0	Rollinsville	CO	FCC
DCM Science Laboratory, Inc.	101258-0	Wheat Ridge	CO	PLM
Denver Instrument Co. Weight Lab	200106-0	Arvada	CO	Calibration
FRS Geotech, Inc.	102078-0	Denver	CO	PLM
Johns Manville Technical Center	100425-0	Littleton	CO	Acoustics
Johns Manville Technical Center	100425-0	Littleton	CO	Thermal Insl.
National Environmental Reference Laboratory	101593-0	Denver	CO	PLM
Reservoirs Environmental Services, Inc.	101896-0	Denver	CO	PLM
Reservoirs Environmental Services, Inc.	101896-0	Denver	CO	TEM
Storagtek Open Area Test Site	200251-0	Louisville	CO	FCC
TUV Product Service, Inc.	100271-1	Boulder	CO	FCC
U.S. EPA - National Enforcement Investigations Center	101703-0	Denver	CO	PLM

CT

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
ChemScope, Inc.	101061-0	North Haven	CT	PLM
Combustion Engineering, Inc.	100563-0	Windsor	CT	Dosimetry
Eastern Materials Testing Lab a division of Jaworski Geotech	100315-0	New Britain	CT	Construction
Electric Boat Corp/A General Dynamics Co. Radiological Ctrl. Dept	100560-0	Groton	CT	Dosimetry
EnviroMed Services, Inc.	101514-0	New Haven	CT	PLM
Fairfield Testing Laboratory, Inc.	100317-0	Stamford	CT	Construction
HYGENIX, INC.	101199-0	Stamford	CT	PLM
Independent Materials Testing Laboratories, Inc.	100316-0	Plainville	CT	Construction
Materials Testing, Inc.	100320-0	Milford	CT	Construction
Mystic Air Quality Consultants, Inc.	101282-0	Groton	CT	PLM
Northeast Utilities Dosimetry Laboratory	100540-0	Newington	CT	Dosimetry
Pratt & Whitney Materials Control Laboratory	200336-0	East Hartford	CT	Fasteners
PSI, Inc.	100319-0	North Haven	CT	Construction
Special Testing Laboratories, Inc.	100308-0	Bethel	CT	Construction

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
State of Connecticut	101237-0	Hartford	CT	PLM
Test-Con Incorporated	200018-0	Danbury	CT	Construction
TRC Environmental Corporation	101424-0	Windsor	CT	PLM
Tri-State Materials Testing Lab, Inc.	200010-0	Newington	CT	Construction
TUV Rheinland of North America, Inc.	200111-0	Newtown	CT	FCC
DE				
Batta Laboratories, Inc.	101032-0	Newark	DE	PLM
Batta Laboratories, Inc.	101032-0	Newark	DE	TEM
Environmental Testing, Inc.	101848-0	Middletown	DE	PLM
FL				
Advanced Industrial Hygiene Services, Inc.	101006-0	Miami	FL	PLM
American Asbestos Laboratories, Inc.	101775-0	Miami	FL	PLM
Apollo Environmental, Inc.	101871-0	Gibsonton	FL	PLM
ASC geoscience, inc.	200316-0	Lakeland	FL	Construction
Celotex Technical Center	100417-0	St. Petersburg	FL	Acoustics
Celotex Technical Center	100417-0	St. Petersburg	FL	Thermal Insl.
Comprehensive Health Services-Environmental Health PLM Laboratory	101759-0	Kennedy Space Center	FL	PLM
Dove Environmental Corporation	102053-0	Miami	FL	PLM
E. M. Analytical, Inc.	101902-0	Dania	FL	TEM
EMSL Analytical, Inc.	200204-0	N. Miami Beach	FL	PLM
EMSL Analytical, Inc.	200204-0	N. Miami Beach	FL	TEM
Florida Power & Light Company	100544-0	Juno Beach	FL	Dosimetry
GLE Associates, Inc.	102003-0	Tampa	FL	PLM
Henderson/Longfellow Associates, Inc.	102077-0	St. Petersburg	FL	PLM
Hygeia Laboratories, Inc.	200335-0	Miami	FL	PLM
Hygeia Laboratories, Inc.	200335-0	Miami	FL	TEM
Law Engineering and Environmental Services, Inc.	101515-0	Tampa	FL	PLM
Law Engineering and Environmental Services, Inc.	101515-1	Miami Lakes	FL	PLM
Micro Analytical Laboratories, Inc.	101151-0	Gainesville	FL	PLM
Micro Analytical Laboratories, Inc.	101151-0	Gainesville	FL	TEM
Motorola PPG Compliance Laboratory	200318-0	Boynton Beach	FL	FCC
Occupational Health Conservation, Inc.	102050-0	Jacksonville	FL	PLM
Paradyne Corporation	200125-0	Largo	FL	FCC
PRIMES (Preflight Integration of Munitions & Electronic Systems)	100422-0	Eglin Air Force Base	FL	MIL-STD-462
Product Safety Engineering, Inc.	200074-0	Dade City	FL	FCC
R. Robinson Analytical Services, Inc.	102041-0	Pensacola	FL	PLM
GA				
American Carpet Laboratories, Inc.	100139-0	Ringgold	GA	Carpet
Analytical Environmental Services, Inc.	102033-0	Atlanta	GA	PLM
Beaulieu of America - Carpet Testing Lab	100190-0	Dalton	GA	Carpet
Cape Environmental Management, Inc.	102111-0	Atlanta	GA	PLM
Clayton Laboratory Services	101125-0	Kennesaw	GA	PLM
Clayton Laboratory Services	101125-0	Kennesaw	GA	TEM
Commercial Testing Company	100120-0	Dalton	GA	Carpet
Cooper Lighting - Metalux Research	200050-0	Americus	GA	Lighting

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
Laboratories				
EMSL Analytical, Inc.	101048-1	Atlanta	GA	PLM
EMSL Analytical, Inc.	101048-1	Atlanta	GA	TEM
Geo-Analytical Services, Inc.	102082-0	Atlanta	GA	PLM
Geo-Analytical Services, Inc.	102082-0	Atlanta	GA	TEM
Georgia Power Company/Enviro. Affairs, Enviro. Lab-Dosimetry	100551-0	Smyrna	GA	Dosimetry
Hayes Microcomputer Products, Inc.	200103-0	Atlanta	GA	FCC
Hygeia Laboratories, Inc.	102087-0	Marietta	GA	PLM
Independent Textile Testing Service, Inc.	100166-0	Dalton	GA	Carpet
Intertek Testing Services NA Inc.	100409-0	Norcross	GA	FCC
Lithonia Testing Laboratories	200007-0	Conyers	GA	Lighting
Materials Analytical Services, Inc.	101235-0	Suwanee	GA	PLM
Materials Analytical Services, Inc.	101235-0	Suwanee	GA	TEM
Mohawk Industries, Inc.- Lyerly Plant	100156-0	Lyerly	GA	Carpet
Professional Testing Laboratory, Inc.	100297-0	Dalton	GA	Carpet
Queen Carpet Test Laboratory	100429-0	Dalton	GA	Carpet
Shaw Industries, Inc., Central Laboratory Operations	100193-0	Dalton	GA	Carpet
TSi, Testing Services, Inc.	100108-0	Dalton	GA	Carpet
United States Technologies, Inc.	200162-0	Alpharetta	GA	FCC
World Carpets, Inc.	100197-0	Dalton	GA	Carpet
HI				
EnvironMETeo Services Inc.	101807-0	Waipahu	HI	PLM
Muranaka Environmental Consultants, Inc.	102085-0	Honolulu	HI	PLM
White Environmental Consultants, Inc.	200350-0	Honolulu	HI	PLM
IA				
Intermec Technologies Corporation, Norand Mobile System Division	100269-0	Cedar Rapids	IA	FCC
Iowa Environmental Services, Inc.	101990-0	Des Moines	IA	PLM
Liberty Labs, Inc.	200123-0	Kimballton	IA	Calibration
University (State) Hygienic Laboratory	101288-0	Iowa City	IA	PLM
University (State) Hygienic Laboratory	101288-0	Iowa City	IA	TEM
ID				
Lockheed Martin Idaho Tech. Co., Standards and Calibration Lab.	200115-0	Idaho Falls	ID	Calibration
IL				
Aires Consulting Group, Inc.	101014-0	Batavia	IL	PLM
Aires Consulting Group, Inc.	101014-0	Batavia	IL	TEM
Analyticalab	101727-0	Willow Springs	IL	PLM
Arden Fasteners	200187-0	Addison	IL	Fasteners
Beling Consultants, Inc.	101356-0	Moline	IL	PLM
Carnow, Conibear & Associates Ltd.	101039-0	Chicago	IL	PLM
Carnow, Conibear & Associates Ltd.	101039-0	Chicago	IL	TEM
Casey Products, Inc.	200278-0	Lisle	IL	Fasteners
Clinton Power Station	100570-0	Clinton	IL	Dosimetry
ComEd - TLD Processing Lab - CTEAM Facility	100541-0	Bolingbrook	IL	Dosimetry
D.L.S. Electronic Systems, Inc.	100276-0	Wheeling	IL	FCC

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
Elite Electronic Engineering Company	100278-0	Downers Grove	IL	FCC
Elite Electronic Engineering Company	100278-0	Downers Grove	IL	MIL-STD-462
EMSL Analytical Mobile Laboratory	200344-0	Chicago	IL	PLM
EMSL Analytical Mobile Laboratory	200344-0	Chicago	IL	TEM
Flexible Products Company	100210-0	Joliet	IL	Thermal Insl.
Hygieneering, Inc.	101997-0	Willowbrook	IL	PLM
JMS Environmental Associates, Ltd.	102012-0	Westmont	IL	PLM
JMS Environmental Associates, Ltd.	102012-0	Westmont	IL	TEM
Landauer, Inc.	100518-0	Glenwood	IL	Dosimetry
MacLean Fasteners - QC Laboratory	200153-0	Mundelein	IL	Fasteners
Midwest Laboratories, Inc.	101894-0	Countryside	IL	PLM
Midwest Laboratories, Inc.	101894-0	Countryside	IL	TEM
Modern Plating Corporation	200320-0	Freeport	IL	Fasteners
Northwestern Steel and Wire Company	200224-0	Sterling	IL	Fasteners
NYLOK Fastener Corporation - Chicago Testing Laboratory	200275-0	Lincolnwood	IL	Fasteners
Philip Environmental Services Corp.	101192-0	Columbia	IL	PLM
Prospect Testing Labs, Inc.	200328-0	Des Plaines	IL	Fasteners
RCM Laboratories, Inc.	101853-0	Countryside	IL	PLM
Riverbank Acoustical Laboratories	100227-0	Geneva	IL	Acoustics
Rockford Bolt & Steel Co.	200255-0	Rockford	IL	Fasteners
Rocknel Fastener Inc.	200307-0	Rockford	IL	Fasteners
STAT Analysis Corporation	101202-0	Chicago	IL	PLM
STAT Analysis Corporation	101202-0	Chicago	IL	TEM
STS Consultants, Ltd.	100191-0	Vernon Hills	IL	Construction
TEM, Incorporated	101130-0	Glen Ellyn	IL	PLM
TEM, Incorporated	101130-0	Glen Ellyn	IL	TEM
Underwriters Laboratories Inc.	100414-0	Northbrook	IL	FCC
Underwriters Laboratories Inc.	100414-0	Northbrook	IL	Thermal Insl.
United Analytical Services, Inc.	101732-0	Hillside	IL	PLM
United Steel and Fasteners Inc.	200341-0	Itasca	IL	Fasteners
USG Research-Systems Evaluation Laboratory	200132-0	Libertyville	IL	Acoustics
IN				
ACM Environmental, Inc.	101977-0	South Bend	IN	PLM
Aearo Company, E·A·RCAL Acoustical Laboratory	100374-0	Indianapolis	IN	Acoustics
EMSL Analytical, Inc.	200188-0	Indianapolis	IN	PLM
EMSL Analytical, Inc.	200188-0	Indianapolis	IN	TEM
ESG Laboratories	102029-0	Indianapolis	IN	PLM
Fuji Component Parts USA, Inc.	200180-0	Indianapolis	IN	Fasteners
Indiana Automotive Fasteners, Inc.	200150-0	Greenfield	IN	Fasteners
Knauf Fiber Glass Research Laboratory	100248-0	Shelbyville	IN	Thermal Insl.
Micro Air, Inc.	101221-0	Indianapolis	IN	PLM
Pace Analytical	101265-0	Indianapolis	IN	PLM
Pace Analytical	101265-0	Indianapolis	IN	TEM
Raytheon Technical Services Co. EMI Laboratory	200317-0	Indianapolis	IN	MIL-STD-462
Rightway Fasteners, Inc.	200210-0	Columbus	IN	Fasteners

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
KS				
Asbestos Consulting & Testing (ACT)	101649-0	Lenexa	KS	PLM
MAC Fasteners, Inc.	200141-0	Ottawa	KS	Fasteners
PSI	101342-0	Lawrence	KS	PLM
Rogers Labs, Inc.	200087-0	Louisburg	KS	FCC
KY				
Analytical Industries, Inc.	101855-0	Paducah	KY	PLM
GE Owensboro Test Laboratory	200305-0	Owensboro	KY	Electric Motors
Guardian Laboratories	101399-0	Louisville	KY	PLM
Intertek Testing Services NA Inc.	100274-0	Lexington	KY	FCC
McCall and Spero Environmental, Inc.	101895-0	Louisville	KY	PLM
McCall and Spero Environmental, Inc.	101895-0	Louisville	KY	TEM
MRS., Analytical Laboratory, Inc.	102113-0	Louisville	KY	PLM
TWN Fastener, Inc.	200194-0	Bowling Green	KY	Fasteners
LA				
EMSL Analytical, Inc.	200375-0	Baton Rouge	LA	PLM
EMSL Analytical, Inc.	200375-0	Baton Rouge	LA	TEM
Entergy Operations, Inc.	100535-0	Taft	LA	Dosimetry
Louisiana Department of Environmental Quality Microanalytical Lab	102000-0	Baton Rouge	LA	PLM
MA				
Acton Environmental Testing, dba National Technical Systems	100347-0	Boxborough	MA	MIL-STD-462
Chomerics Test Services (CTS)	100296-0	Woburn	MA	FCC
Covino Environmental Associates, Inc.	101781-0	Woburn	MA	PLM
Curtis-Straus LLC	200057-0	Littleton	MA	FCC
Data General Corporation	100339-0	Westboro	MA	FCC
Digital Regulatory Engineering and Testing Services	100413-0	Marlboro	MA	FCC
Duke Engineering and Services Environmental Laboratory	100524-0	Bolton	MA	Dosimetry
Holometrix - Micromet	100113-0	Bedford	MA	Thermal Insl.
Hub Testing Laboratory, Inc.	101045-0	Waltham	MA	PLM
Hygeia Laboratories, Inc.	101011-0	Woburn	MA	PLM
Hygeia Laboratories, Inc.	101011-0	Woburn	MA	TEM
Hygienetics Laboratory Services	101147-0	Boston	MA	PLM
Hygienetics Laboratory Services	101147-0	Boston	MA	TEM
Instron Force Calibration Laboratory	105023-0	Canton	MA	Calibration
Integrity Design & Test Services, Inc.	200004-0	Littleton	MA	FCC
Intertek Testing Services NA Inc.	100270-0	Boxborough	MA	FCC
Intertek Testing Services NA Inc.	100270-0	Boxborough	MA	MIL-STD-462
Motorola Product Quality Assurance Laboratory	200005-0	Mansfield	MA	FCC
Osram Sylvania Inc., Test & Measurements Laboratory	100403-0	Beverly	MA	Lighting
ProScience Analytical Services, Inc.	200090-0	Woburn	MA	PLM
ProScience Analytical Services, Inc.	200090-0	Woburn	MA	TEM
Quest Engineering Solutions, Inc.	200036-0	N. Billerica	MA	FCC
Robbins Manufacturing Co., Inc.	200161-0	Fall River	MA	Fasteners

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
SCILAB BOSTON, Inc.	102079-0	East Weymouth	MA	PLM
SCILAB BOSTON, Inc.	102079-0	East Weymouth	MA	TEM
Severn Trent Laboratories (MA)	101005-0	N. Billerica	MA	PLM
Severn Trent Laboratories (MA)	101005-0	N. Billerica	MA	TEM
Test Site Services, Inc.	100419-0	Marlboro	MA	FCC
W.R. Grace & Co.	200258-0	Cambridge	MA	Construction
MD				
AMA Analytical Services, Inc.	101143-0	Lanham	MD	PLM
AMA Analytical Services, Inc.	101143-0	Lanham	MD	TEM
ATC Associates Inc.	200250-0	Columbia	MD	PLM
Baltimore Gas & Electric Company	100501-0	Lusby	MD	Dosimetry
CDRH X-Ray Calibration Laboratory	105018-0	Rockville	MD	Calibration
Composite Panel Association (CPA)	100418-0	Gaithersburg	MD	Wood Prod.
DHMH-Air Quality Laboratory	101523-0	Baltimore	MD	PLM
EMSL Analytical, Inc.	200293-0	Beltsville	MD	PLM
EMSL Analytical, Inc.	200293-0	Beltsville	MD	TEM
MET Laboratories, Inc.	100273-0	Baltimore	MD	FCC
Metropolitan Environmental Testing Services dba METS Laboratories	200165-0	Waldorf	MD	PLM
NAHB Research Center, Inc.	100104-0	Upper Marlboro	MD	Commercial
NAHB Research Center, Inc.	100104-0	Upper Marlboro	MD	Thermal Insl.
Naval Dosimetry Center	100504-0	Bethesda	MD	Dosimetry
NAWC AD 5.1.7.3. EMI Lab	100408-0	Patuxent River	MD	MIL-STD-462
PCTEST Engineering Laboratory, Inc.	100431-0	Columbia	MD	FCC
U.S. Army Center for Health Promotion and Preventive Medicine	200044-0	Aberdeen Proving Ground	MD	PLM
Washington Laboratories, Ltd.	200066-0	Gaithersburg	MD	FCC
Windermere Info. Tech. Sys. Military/Commercial Compliance Lab.	200084-0	Annapolis	MD	FCC
ME				
Northeast Test Consultants	101565-0	Westbrook	ME	PLM
MI				
AAC Trinity, Inc.	101168-0	Farmington Hills	MI	PLM
AHD	200129-0	Dowagiac	MI	FCC
Apex Research Laboratory	102118-0	Whitmore Lake	MI	PLM
Detroit Edison, Fermi 2 Dosimetry Laboratory	100529-0	Newport	MI	Dosimetry
Dexter Fastener Technologies, Inc.	200144-0	Dexter	MI	Fasteners
Dow Chemical N. America Foam Products Research, Prod. Perf. Lab.	100103-0	Midland	MI	Thermal Insl.
Eaton E3 Laboratory	100382-0	Southfield	MI	MIL-STD-462
EMSL Analytical, Inc.	101048-4	Ann Arbor	MI	PLM
EMSL Analytical, Inc.	101048-4	Ann Arbor	MI	TEM
ERT Testing Services	101295-0	Highland Park	MI	PLM
Fabristeel Products Inc.	200329-0	Taylor	MI	Fasteners
Fibertec, Inc.	101510-0	Holt	MI	PLM
Multifastener Laboratory	200267-0	Taylor	MI	Fasteners
NSS Technologies	200184-0	Plymouth	MI	Fasteners
NYLOK Fastener Corporation	200273-0	Macomb	MI	Fasteners
Wilson-Garner Company	200136-0	Harrison Township	MI	Fasteners

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
Wolverine Plating Corp.	200230-0	Roseville	MI	Fasteners
Wonder Makers Environmental, Inc.	102065-0	Kalamazoo	MI	PLM
MN				
3M Product Safety EMC Laboratory	200033-0	St. Paul	MN	FCC
Braun Intertec Corporation	101234-0	Minneapolis	MN	PLM
Braun Intertec Corporation	101234-0	Minneapolis	MN	TEM
Control Data Accredited OSI Test Center	100354-0	Arden Hills	MN	GOSIP
IBM Rochester EMC Lab	200091-0	Rochester	MN	FCC
Institute for Environmental Assessment	101249-0	Brooklyn Park	MN	PLM
Intertek Testing Services NA, Inc.	200049-0	Oakdale	MN	FCC
Legend Technical Services, Inc.	102081-0	St. Paul	MN	PLM
Maxim Technologies, Inc.	200046-0	St. Paul	MN	Acoustics
Maxim Technologies, Inc.	200046-0	St. Paul	MN	Thermal Insl.
Minnesota Metrology Laboratory	105003-0	St. Paul	MN	Calibration
Nova Consulting Group, Inc.	101545-0	Chaska	MN	PLM
Orfield Laboratories, Inc.	200248-0	Minneapolis	MN	Acoustics
TUV Product Service, Inc.	100271-0	New Brighton	MN	FCC
TUV Product Service, Inc.	100271-0	New Brighton	MN	MIL-STD-462
TUV Telecom Services, Inc.	200039-0	St. Paul	MN	FCC
MO				
AlliedSignal FM&T Metrology	200108-0	Kansas City	MO	Calibration
Bodycote Industrial Testing, Inc.	101072-0	St. Louis	MO	Fasteners
EnviroHealth Technologies, Inc.	200374-0	St. Louis	MO	PLM
Environmental Health Laboratories	101506-0	Clayton	MO	PLM
Kingston Environmental Laboratory	200041-0	Lee's Summit	MO	PLM
Larron Laboratory	101415-0	Cape Girardeau	MO	PLM
Mallinckrodt Group, Inc.	100503-0	Maryland Heights	MO	Dosimetry
Microscopic Analysis, Inc.	101037-0	St. Louis	MO	PLM
OCCU-TEC, Inc.	102025-0	Kansas City	MO	PLM
Union Electric Company, Callaway Plant	100502-0	Fulton	MO	Dosimetry
MS				
Daybrite Lighting (Genlyte Thomas Group) Photometric Laboratory	200016-0	Tupelo	MS	Lighting
MT				
ILX Lightwave Corporation, Optical Calibration	200211-0	Bozeman	MT	Calibration
Maxim Technologies, Inc.	101292-0	Billings	MT	PLM
NC				
Accredited Environmental Technologies, Inc.	200236-0	Leland	NC	PLM
Advanced Energy, Industrial Energy Laboratory	200081-0	Raleigh	NC	Electric Motors
Asbestos Analysis and Information Service, Inc.	101261-0	Four Oaks	NC	PLM
Carolina Environmental, Inc.	101768-0	Cary	NC	PLM
Carolina Power & Light Company, Harris Energy & Enviro. Center	100517-0	New Hill	NC	Dosimetry
Duke Power Company Dosimetry Laboratory	100505-0	Charlotte	NC	Dosimetry
EEC, Inc.	101088-0	Raleigh	NC	PLM

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EMC International, Inc.	200094-0	Youngsville	NC	FCC
EMSL Analytical, Inc.	102104-0	Greensboro	NC	PLM
EMSL Analytical, Inc.	102104-0	Greensboro	NC	TEM
EMSL Analytical, Inc.	200247-0	Charlotte	NC	PLM
IBM Charlote EMC Facility	200337-0	Charlotte	NC	FCC
IBM RTP PSG EMC Test Labs	200200-0	Research Triangle Park	NC	FCC
Law Engineering and Environmental Services, Inc.	101226-0	Charlotte	NC	PLM
S&ME, Inc.	102075-0	Charlotte	NC	PLM
Troxler Radiation Monitoring Svc. a div. of Troxler Elect. Labs	100559-0	Research Triangle Park	NC	Dosimetry
Underwriters Laboratories, Inc.	200246-0	Research Triangle Park	NC	FCC
ND				
A.R.C. Laboratories, Inc.	101832-0	Grand Forks	ND	PLM
NH				
Cabletron Systems, Inc.	200121-0	Rochester	NH	FCC
Dames & Moore, Inc.	101433-0	Salem	NH	PLM
Retlif Testing Laboratories	100267-1	Goffstown	NH	FCC
The Scott Lawson Group, Ltd.	101228-0	Concord	NH	PLM
NJ				
Aerospace NYLOK - a subsidiary of the NYLOK Fastener Corporation	200271-0	Hawthorne	NJ	Fasteners
Bell Laboratories, Division Lucent Technologies, Inc.	101965-0	Murray Hill	NJ	PLM
Craig Environmental Services, Inc.	200289-0	Mays Landing	NJ	PLM
Duro-Test Corporation	200283-0	Clifton	NJ	Lighting
EAI, Inc.	102114-0	Jersey City	NJ	PLM
EMSL Analytical, Inc.	101048-0	Westmont	NJ	PLM
EMSL Analytical, Inc.	101048-0	Westmont	NJ	TEM
EMSL Analytical, Inc.	101048-2	Piscataway	NJ	PLM
EMSL Analytical, Inc.	101048-2	Piscataway	NJ	TEM
EMSL Analytical, Inc.	200310-0	Carlstadt	NJ	PLM
EMSL Analytical, Inc.	200310-0	Carlstadt	NJ	TEM
Enviro Techniques, Inc.	200024-0	Paterson	NJ	PLM
Environmental Monitoring & Consulting Associates	101087-0	Somerville	NJ	PLM
Fountain Compliance Laboratory	200101-0	Somerset	NJ	FCC
Hillmann Environmental Company	101421-0	Union	NJ	PLM
International Asbestos Testing Laboratory	101165-0	Mt. Laurel	NJ	PLM
International Asbestos Testing Laboratory	101165-0	Mt. Laurel	NJ	TEM
Lucent Technologies, Global Product Compliance Lab	100275-0	Holmdel	NJ	FCC
NAWC-Aircraft Div. Lakehurst Electromagnetic Interference Lab.	200222-0	Lakehurst	NJ	MIL-STD-462
NJSP Calibration Laboratory	200006-0	Princeton	NJ	Dosimetry
PMK Group, Inc.	101301-0	Kenilworth	NJ	PLM
STERIS-Isomedix Services	200235-0	Whippany	NJ	Calibration

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
NM				
Assaigai Analytical Laboratories, Inc.	101457-0	Albuquerque	NM	PLM
Eberline Dosimetry Service	100515-0	Albuquerque	NM	Dosimetry
Sandia National Laboratories	105002-0	Albuquerque	NM	Calibration
NV				
Asbestos TEM Laboratories, Inc.	200104-0	Sparks	NV	PLM
Converse Consultants MR, Inc.	102091-0	Reno	NV	PLM
U.S. EPA	200231-0	Las Vegas	NV	Dosimetry
NY				
ABM Environmental Consultants, Inc.	102015-0	Long Island City	NY	PLM
Airtek Environmental Corp.	102011-0	New York	NY	PLM
ALAC	200323-0	Bronx	NY	PLM
Ambient Labs, Inc.	101618-0	New York	NY	PLM
ATC Associates, Inc.	101187-0	New York	NY	PLM
ATC Associates, Inc.	101187-0	New York	NY	TEM
Athenica Environmental Services, Inc.	101958-0	Long Island City	NY	PLM
Chopra-Lee, Inc.	200095-0	Grand Island	NY	PLM
Chopra-Lee, Inc.	200095-0	Grand Island	NY	TEM
Con Edison - ChemLab	101558-0	Long Island City	NY	PLM
Con Edison, Indian Point	100538-0	Buchanan	NY	Dosimetry
D/L Laboratories	100252-0	New York	NY	Commercial
Diviersified T.E.S.T. Technologies, Inc.	200340-0	Groton	NY	FCC
Eastern Analytical Services, Inc.	101646-0	Elmsford	NY	PLM
Eastern Analytical Services, Inc.	101646-0	Elmsford	NY	TEM
Eastman Kodak Co.-Regulatory Compliance Center-EMC Facility	200313-0	Rochester	NY	FCC
EMSL Analytical, Inc.	101048-9	New York	NY	PLM
EMSL Analytical, Inc.	101048-9	New York	NY	TEM
EMSL Analytical, Inc.	101048-10	Carle Place	NY	PLM
EMSL Analytical, Inc.	101048-10	Carle Place	NY	TEM
EMSL Analytical, Inc.	200056-0	Williamsville	NY	PLM
EMSL Analytical, Inc.	200056-0	Williamsville	NY	TEM
EMSL Analytical, Inc.	200333-0	Elmsford	NY	PLM
EMSL Analytical, Inc.	200333-0	Elmsford	NY	TEM
Enviro-Probe, Inc.	101222-0	Bronx	NY	PLM
Environmental Testing Laboratories, Inc.	101937-0	Farmingdale	NY	TEM
Fairway Testing Company, Inc.	100340-0	Stony Point	NY	Construction
Galson Laboratories	101375-0	East Syracuse	NY	PLM
GE Industrial Systems, Renewal Services - TEMS	200029-0	Rome	NY	Calibration
Ginna Nuclear Station	100514-0	Ontario	NY	Dosimetry
IBM Hudson Valley Acoustics Laboratory	100323-0	Poughkeepsie	NY	Acoustics
Industrial Acoustics Company, Inc., Aero-Acoustics Laboratory	100404-0	Bronx	NY	Acoustics
Intertek Testing Services NA Inc.	100402-0	Cortland	NY	Lighting
Intertek Testing Services NA Inc.	100402-0	Cortland	NY	Thermal Insl.
JLC Environmental Consultants, Inc.	101953-0	New York	NY	PLM
KAM Consultants	102047-0	Long Island City	NY	PLM
KAM Consultants	102047-0	Long Island City	NY	TEM
Lockheed Martin Control Systems EMI	200142-0	Johnson City	NY	MIL-STD-462

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Laboratory				
New York Testing Laboratories, Inc.	101332-0	Bay Shore	NY	PLM
New York Testing Laboratories, Inc.	101332-0	Bay Shore	NY	TEM
NGC Testing Services, National Gypsum Research Center	200291-0	Buffalo	NY	Acoustics
Niche Analysis, Inc.	102057-0	Mount Vernon	NY	PLM
NY Environmental & Analytical Labs, Inc.	101967-0	Port Washington	NY	PLM
O'Brien & Gere Laboratories, Inc.	101343-0	Syracuse	NY	PLM
O'Brien & Gere Laboratories, Inc.	101343-0	Syracuse	NY	TEM
PSI	101755-0	New York	NY	PLM
PSI, Inc.	101070-0	Farmingdale	NY	PLM
Rapid Environmental Management, Inc.	101974-0	Great Neck	NY	PLM
Retlif Testing Laboratories	100267-0	Ronkonkoma	NY	FCC
Retlif Testing Laboratories	100267-0	Ronkonkoma	NY	MIL-STD-462
Scientific Laboratories, Inc.	101904-1	New York	NY	PLM
Scientific Laboratories, Inc.	101904-1	New York	NY	TEM
Taylor Environmental Group, Inc.	102101-0	Floral Park	NY	PLM
Testing Mechanics Corp.	102001-0	Seaford	NY	PLM
Testwell Laboratories, Inc./Testwell Industries, Inc.	200083-0	Ossining	NY	Construction
Testwell Laboratories, Inc./Testwell Industries, Inc.	200083-0	Ossining	NY	PLM
Testwell Laboratories, Inc./Testwell Industries, Inc.	200083-0	Ossining	NY	TEM
Underwriters Laboratories, Inc.	100255-0	Melville	NY	FCC
Vartest Laboratories, Inc.	200027-0	New York	NY	Carpet
WKP Laboratories, Inc.	101950-0	Ossining	NY	PLM

OH

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
A T Labs	101062-0	Youngstown	OH	PLM
American Electric Power, Environmental Laboratory	102102-0	Columbus	OH	PLM
ATC Associates Inc.	102071-0	Cincinnati	OH	PLM
DataChem Laboratories	101917-0	Cincinnati	OH	PLM
DataChem Laboratories	101917-0	Cincinnati	OH	TEM
DLZ Laboratories, Inc.	101060-0	Columbus	OH	PLM
EA Group	101019-0	Mentor	OH	PLM
EssTek Ohio, Inc.	102093-0	Middleburg Heights	OH	PLM
Fluor Daniel Fernald, Inc., Analytical Laboratory Services	102010-0	Cincinnati	OH	PLM
GE Lighting- Engineering Support - NA	100398-0	Cleveland	OH	Lighting
Gelles Laboratories, Inc.	101170-0	Columbus	OH	PLM
Gelles Laboratories, Inc.	101170-0	Columbus	OH	TEM
Lockheed Martin Utility Services, Inc.	101383-0	Piketon	OH	PLM
m.a.c. Paran Consulting Services, Inc.	102108-0	Amelia	OH	PLM
NASA-Lewis Research Center	200130-0	Cleveland	OH	PLM
NOVA Machine Products	200202-0	Middleburg Heights	OH	Fasteners
Owens Corning Testing Systems - Product Testing Laboratory	100109-0	Granville	OH	Acoustics
Owens Corning Testing Systems - Product Testing Laboratory	100109-0	Granville	OH	Thermal Insl.
TolTest, Inc.	101594-0	Toledo	OH	PLM
Tremco, Inc. - Roofing Division, An RPM	101188-0	Beachwood	OH	PLM

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
Company				
Webber Gage Division / L.S. Starrett Co.	200038-0	Cleveland	OH	Calibration
OK				
Hollytex Carpet Mills, Inc.	100247-0	Anadarko	OK	Carpet
Oklahoma Dept. of Environmental Quality-State Environmental Lab	102112-0	Oklahoma City	OK	PLM
Precision Testing Laboratories, Inc.	101580-0	Moore	OK	PLM
QuanTEM Laboratories, LLC	101959-0	Oklahoma City	OK	PLM
QuanTEM Laboratories, LLC	101959-0	Oklahoma City	OK	TEM
SGS U.S. Testing Company, Inc.	100416-0	Tulsa	OK	Commercial
SGS U.S. Testing Company, Inc.	100416-0	Tulsa	OK	Thermal Insl.
TEC-AN, Inc.	200325-0	Oklahoma City	OK	PLM
OR				
AGRA Earth and Environmental, Inc. - Env. Chemistry Laboratory	200357-0	Portland	OR	PLM
ECS/Wagner Environmental	101064-0	Eugene	OR	PLM
HPNW	100567-0	Tigard	OR	Dosimetry
InFocus Systems, Inc.	200152-0	Wilsonville	OR	FCC
Northwest EMC, Inc.	200059-0	Newberg	OR	FCC
PBS Environmental Building Consultants, Inc.	101910-0	Portland	OR	PLM
Portland Bolt and Manufacturing Company, Inc. Testing Laboratory	200168-0	Portland	OR	Fasteners
Professional Service Industries, Inc., Pittsburgh Test. Lab. Div.	100430-0	Eugene	OR	Wood Prod.
Timberco, Inc.- dba TECO	100420-0	Eugene	OR	Wood Prod.
Willamette Industries, Inc. West Coast Development Lab	200045-0	Wilsonville	OR	Commercial
PA				
Accredited Environmental Technologies, Inc.	101051-0	Media	PA	PLM
AGX, Inc.	101578-0	Cranberry Township	PA	PLM
Allegheny Asbestos Analysis	101704-0	Carnegie	PA	PLM
American Testing Laboratories, Inc.	100146-0	Lancaster	PA	Construction
Analab, LLC	200260-0	Sterling	PA	FCC
Architectural Testing Inc.	200361-0	York	PA	Acoustics
Armstrong Acoustic Labs, Armstrong World Ind., Inc. Innov. Center	100228-0	Lancaster	PA	Acoustics
BarTech Inc. - Chemical Laboratory	200148-0	Johnstown	PA	Fasteners
Criterion Laboratories, Inc.	102046-0	Bensalem	PA	PLM
Dodge-Regupol, Inc. Laboratory	200030-0	Lancaster	PA	Commercial
Duquesne Light Company, Beaver Valley Power Station	100521-0	Shippingport	PA	Dosimetry
GA Environmental Services, Inc.	101996-0	Eddystone	PA	PLM
GPU Nuclear Chemistry/Materials Labs.	102064-0	Reading	PA	PLM
GPU Nuclear Corp.	100510-0	Middletown	PA	Dosimetry
Henry Troemner, Inc.	105013-0	Philadelphia	PA	Calibration
Instrument Specialties Co., Inc.	200076-0	Delaware Water Gap	PA	FCC
Kevco Services, Inc.	101941-0	Butler	PA	PLM
Levecque Technical Center	100101-0	Blue Bell	PA	Thermal Insl.
Michael & Associates	100427-0	State College	PA	Acoustics

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Microbac Laboratories, Inc.	101035-0	Erie	PA	PLM
PA DEP Bureau of Laboratories	101323-0	Harrisburg	PA	PLM
Philip Analytical Services	101262-0	Reading	PA	PLM
Philip Analytical Services	101262-0	Reading	PA	TEM
PP&L, Inc.	100554-0	Allentown	PA	Dosimetry
PSI	101350-0	Pittsburgh	PA	PLM
PSI	101350-0	Pittsburgh	PA	TEM
R & B Enterprises	100280-0	West Conshohocken	PA	FCC
R & B Enterprises	100280-0	West Conshohocken	PA	MIL-STD-462
RJ Lee Group, Inc.	101208-0	Monroeville	PA	PLM
RJ Lee Group, Inc.	101208-0	Monroeville	PA	TEM
SPS Technologies; Aerospace Fastener Group	200164-0	Jenkintown	PA	Fasteners
The Perryman Company	200128-0	Houston	PA	Fasteners
Volz Environmental Services, Inc.	101269-0	Pittsburgh	PA	PLM
PR				
Analytical Environmental Services International, Inc.	200051-0	Hato Rey	PR	PLM
RI				
EMSL Analytical, Inc.	102105-0	Warwick	RI	PLM
RI Analytical Laboratories, Inc.	101440-0	Warwick	RI	PLM
SNB Laboratory	200308-0	Cumberland	RI	Fasteners
SC				
Compliance Test Laboratories, Inc.	200237-0	Liberty	SC	FCC
Davis & Floyd, Inc.	101410-0	Greenwood	SC	PLM
South Carolina Department of Health & Environmental Control	101572-0	Columbia	SC	PLM
TN				
Leland-Powell Fasteners, Inc. Fastener Testing Laboratory	200171-0	Martin	TN	Fasteners
MagneTek (Lexington) Engineering Laboratory	200053-0	Lexington	TN	Electric Motors
National Econ Corporation	200047-0	Memphis	TN	PLM
Oak Ridge Metrology Center	105000-0	Oak Ridge	TN	Calibration
Oak Ridge National Laboratory	200228-0	Oak Ridge	TN	PLM
Oak Ridge National Laboratory Electric Machinery Center	200244-0	Oak Ridge	TN	Electric Motors
R & D Services, Inc.	200265-0	Cookeville	TN	Thermal Insl.
Tennessee Valley Authority External Dosimetry Service	100516-0	Soddy-Daisy	TN	Dosimetry
TX				
A & B Environmental Services, Inc.	101793-0	Houston	TX	PLM
Acoustic Systems Acoustical Research Facility	100286-0	Austin	TX	Acoustics
ATC Associates Inc.	200290-0	Dallas	TX	PLM
Atomic Energy Industrial Laboratory of the Southwest, Inc.	100556-0	Houston	TX	Dosimetry
Austin Analytical Laboratory	200014-0	Austin	TX	PLM
CAM Environmental Services, Inc.	200240-0	Pasadena	TX	PLM

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
CHEMTEX Environmental Laboratory, Inc.	200025-0	Port Arthur	TX	PLM
Compaq Computer Corp. Emissions Control Lab	200058-0	Houston	TX	FCC
Compaq Corporate Metrology	200154-0	Houston	TX	Calibration
Crisp Analytical Laboratory	200349-0	Carrollton	TX	PLM
Crisp Analytical Laboratory	200349-0	Carrollton	TX	TEM
Dell Regulatory Test Laboratories	200052-0	Round Rock	TX	Acoustics
Dell Regulatory Test Laboratories	200052-0	Round Rock	TX	FCC
Dolphin Environmental Consultants	102086-0	Stafford	TX	PLM
EcoSystems Environmental, Inc.	101162-0	Carrollton	TX	PLM
EMSL Analytical, Inc.	102106-0	Houston	TX	PLM
EMSL Analytical, Inc.	102106-0	Houston	TX	TEM
EMSL Analytical, Inc.	200034-0	Dallas	TX	PLM
EMSL Analytical, Inc.	200034-0	Dallas	TX	TEM
Envirotest, Inc.	101595-0	Houston	TX	PLM
ERI Consulting Engineers, Inc.	101232-0	Tyler	TX	PLM
HIH Laboratory, Inc.	101233-0	Webster	TX	PLM
IBM Austin EMC	200112-0	Austin	TX	FCC
Jimmie Ann Bolton	101735-0	Austin	TX	PLM
KTL Dallas, Inc.	100426-0	Lewisville	TX	FCC
LambdaMetrics, Inc.	200122-0	Cedar Park	TX	FCC
Law Engineering and Environmental Services, Inc.	101152-0	Houston	TX	PLM
Law Engineering and Environmental Services, Inc.	101973-0	Dallas	TX	PLM
Loflin Environmental Services	102044-0	Houston	TX	PLM
Maxim Technologies, Inc.	101091-0	Dallas	TX	PLM
Maxim Technologies, Inc.	101091-0	Dallas	TX	TEM
Maxim Technologies, Inc.	101091-1	Houston	TX	PLM
McKee Environmental Health, Inc.	101135-0	Friendswood	TX	PLM
Metroplex Metrology Lab, Inc.	200262-0	Fort Worth	TX	Calibration
Micro Air of Texas, Inc.	102008-0	Houston	TX	PLM
Omni Environmental, Inc.	102061-0	Austin	TX	PLM
Professional Testing (EMI), Inc.	200062-0	Round Rock	TX	FCC
Quest MicroAnalytics, Inc.	200249-0	Dallas	TX	PLM
Reservoirs Environmental Services, Inc.	101896-1	Houston	TX	PLM
Reservoirs Environmental Services, Inc.	101896-1	Houston	TX	TEM
RheinTexas, Inc.	200245-0	Plano	TX	FCC
RJ Lee Group, Inc.	101208-5	Houston	TX	PLM
RJ Lee Group, Inc.	101208-5	Houston	TX	TEM
South Texas Project Dosimetry Laboratory	100519-0	Wadsworth	TX	Dosimetry
Steve Moody Micro Services, Inc.	102056-0	Carrollton	TX	PLM
Steve Moody Micro Services, Inc.	102056-0	Carrollton	TX	TEM
Sun City Analytical, Inc.	101870-0	El Paso	TX	PLM
Toshiba/Houston Test Laboratory	200088-0	Houston	TX	Electric Motors
TU Electric-Comanche Peak Steam Electric Station	100528-0	Glen Rose	TX	Dosimetry
US Air Force Center for Radiation Dosimetry	100548-0	Brooks AFB	TX	Dosimetry
Walker Bolt Manufacturing Co.	200126-0	Houston	TX	Fasteners
Water, Earth Solutions & Technologies, Inc.	102043-0	Dallas	TX	PLM
Wayne Langston, Inc.	200021-0	League City	TX	FCC

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
UT				
Communication Certification Laboratory	100272-0	Salt Lake City	UT	FCC
Dixon Information Inc.	101012-0	South Salt Lake	UT	PLM
VA				
Alloy & Stainless Testing	200353-0	Virginia Beach	VA	Fasteners
American Medical Laboratories, Inc.	101136-0	Chantilly	VA	PLM
Applied Environmental, Inc.	101611-0	Reston	VA	PLM
Cryptographic Equipment Assessment Lab. (CEAL)	200002-0	McLean	VA	Cryptographic
EMSL Analytical, Inc.	101277-0	Fairfax	VA	PLM
EMSL Analytical, Inc.	101277-0	Fairfax	VA	TEM
Environmental Hazards Services, L.L.C.	101882-0	Richmond	VA	PLM
Environmental Testing and Monitoring Services, Inc.	200131-0	Virginia Beach	VA	PLM
Froehling & Robertson, Inc.	102060-0	Richmond	VA	PLM
Hubbell Lighting Photometric Laboratory	200020-0	Christiansburg	VA	Lighting
Industrial Laboratory	102115-0	Portsmouth	VA	PLM
Labcorp Analytics Laboratory	101004-0	Richmond	VA	PLM
Law Engineering and Environmental Services, Inc.	101847-0	Sterling	VA	PLM
Marine Chemist Service, Inc.	101425-0	Newport News	VA	PLM
Newport News Shipbuilding Radiological Control Department	100561-0	Newport News	VA	Dosimetry
Pacific Environmental Services, Inc.	101190-0	Herndon	VA	PLM
Proxtronics, Inc.	100573-0	Burke	VA	Dosimetry
Rhein Tech Laboratories, Inc.	200061-0	Herndon	VA	FCC
RJ Lee Group, Inc.	101208-3	Manassas	VA	PLM
RJ Lee Group, Inc.	101208-3	Manassas	VA	TEM
Schneider Laboratories, Inc.	101150-0	Richmond	VA	PLM
Scientific Laboratories, Inc.	101904-0	Midlothian	VA	PLM
Scientific Laboratories, Inc.	101904-0	Midlothian	VA	TEM
SEAS, Inc.	101185-0	Blacksburg	VA	PLM
State of Virginia Metrology Lab	105007-0	Richmond	VA	Calibration
TC Analytics, Inc.	101672-0	Norfolk	VA	PLM
VT				
Vermont Fasteners Manufacturing	200254-0	Swanton	VT	Fasteners
WA				
APA - The Engineered Wood Association Research Center	100423-0	Tacoma	WA	Wood Prod.
Battelle - Pacific Northwest National Laboratory	200216-0	Richland	WA	Dosimetry
BCAG Fastener Quality Test Lab Everett Site	200292-0	Seattle	WA	Fasteners
Clayton Environmental Consultants	101106-0	Seattle	WA	PLM
EMSL Analytical, Inc.	200019-0	Seattle	WA	PLM
EMSL Analytical, Inc.	200019-0	Seattle	WA	TEM
Fluke Corporation Primary Standards Laboratory	105016-0	Everett	WA	Calibration
Key Tronic Corp.	200096-0	Spokane	WA	FCC
Lab/Cor, Inc.	101920-0	Seattle	WA	TEM

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
Mountain Laboratories	101890-0	Spokane	WA	PLM
Naval Nuclear Propulsion Program Directorate, Washington, D.C.	100565-0	Bremerton	WA	Dosimetry
Northwest Envirocon, Inc.	101869-0	Vancouver	WA	PLM
NVL Laboratories, Inc.	102063-0	Seattle	WA	PLM
Pacific Northwest National Laboratory	105020-0	Richland	WA	Calibration
Pacific Rim Environmental, Inc.	101631-0	Tukwila	WA	PLM
Prezant Associates, Inc.	101886-0	Seattle	WA	PLM
Puget Sound Naval Shipyard	101539-0	Bremerton	WA	PLM
Safe Environment of America	102021-0	Kent	WA	PLM
Underwriters Laboratories Inc.	200214-0	Camas	WA	FCC
United States Dosimetry Technology, Inc.	100571-0	Richland	WA	Dosimetry
Waste Management Federal Services of Hanford, Inc.	101058-0	Richland	WA	PLM

WI

AIResearch, Inc.	101868-0	Wauwatosa	WI	PLM
Aurora Consolidated Laboratories	101661-0	West Allis	WI	PLM
Hufcor Laboratory	100239-0	Janesville	WI	Acoustics
Intertek Testing Services NA Inc.	200031-0	Middleton	WI	Thermal Insl.
Marathon Electric - Wausau Engineering Lab.	200134-0	Wausau	WI	Electric Motors
Micro Analytical, Inc.	101247-0	Milwaukee	WI	PLM
PFS Corporation	100421-0	Madison	WI	Wood Prod.
PSI, Inc.	200042-0	New Berlin	WI	PLM
Rice Lake Weighing Systems	105001-0	Rice Lake	WI	Calibration
Wausau Insurance Companies	101079-0	Wausau	WI	PLM
Wisconsin Occupational Health Laboratory	101109-0	Madison	WI	PLM

WV

Environmental Services International, Inc.	101306-0	St. Albans	WV	PLM
Philips Lighting Corporate Calibration & Standards Laboratory	100399-0	Fairmont	WV	Lighting
Triad Environmental Consulting, Inc.	102073-0	Huntington	WV	PLM

BRAZIL

Acominas - Analysis and Testing Laboratory	200185-0	Ouro Branco MG	BRAZIL	Fasteners
Belgo-Mineira Chemical Laboratory	200196-0	35.930-900 Joao Monlevade	BRAZIL	Fasteners

CANADA

Canadian Standards Association	100322-0	Etobicoke Ontario	CANADA	Commercial
Canadian Standards Association	100322-0	Etobicoke Ontario	CANADA	FCC
Celestica International Inc.	200055-0	North York, Ontario	CANADA	FCC
Chatfield Technical Consulting Limited	101103-0	Mississauga Ontario	CANADA	PLM
DOMUS ITSL, a division of LGS Group, Incorporated	200017-0	Ottawa Ontario	CANADA	Cryptographic
Electronics Test Centre	200282-0	Kanata, Ont.	CANADA	FCC
Ingersoll Fasteners	200208-0	Ingersoll Ontario	CANADA	Fasteners
Ivaco Rolling Mills, Chemistry Laboratory	200143-0	L'Orignal Ontario	CANADA	Fasteners
KTL Ottawa Inc.	100351-0	Ottawa Ontario	CANADA	FCC
Northern Telecom BVW Lab	200098-0	Belleville, Ontario	CANADA	FCC
Northern Telecom Product Integrity Labs.	100350-0	Kanata Ontario	CANADA	FCC
Pinchin Environmental Ltd.	101270-0	Mississauga Ontario	CANADA	PLM
Small IAC Test Laboratory	200287-0	Peterborough	CANADA	Electric Motors

(See 'How To Use This Directory' on page 7.)

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
UltraTech Engineering Labs Inc.	200093-0	Mississauga, Ontario	CANADA	FCC
Vibro-Acoustics Laboratory	100424-0	Scarborough Ontario	CANADA	Acoustics
INDIA				
Sundram Fasteners Limited (Inhouse test laboratory)	200212-0	Chennai (Madras), Tamil	INDIA	Fasteners
Sundram Fasteners Limited Chemical Testing Laboratory	200256-0	Andhra Pradesh	INDIA	Fasteners
JAPAN				
A-Pex International Co., Ltd. Yokowa Laboratory	200109-0	Mie-ken	JAPAN	FCC
Akzo Kashima Ltd. Kakegawa EMC Test Site	100290-2	Shizuoka	JAPAN	FCC
Akzo Kashima Ltd., Kashima EMC Site	100290-0	Ibaraki	JAPAN	FCC
Akzo Kashima Ltd., Kawasaki Technical Center	200300-0	Kawasaki	JAPAN	FCC
Akzo Kashima Ltd., Matsuda EMC Test Site	100290-4	Kanagawa	JAPAN	FCC
Akzo Kashima Ltd., Nagano EMC Test Site	100290-3	Nagano	JAPAN	FCC
Akzo Kashima Ltd., Tochigi EMC Test Site	100290-5	Tochigi	JAPAN	FCC
Aoyama Fastener Laboratory	200213-0	Niwa-gun, Aichi Prefecture	JAPAN	Fasteners
Asakawa Screw Co., Ltd.	200197-0	Yokohama	JAPAN	Fasteners
Asakawa Screw Co., Ltd. Kawawa Factory	200257-0	Yokohama	JAPAN	Fasteners
Chemitox EMC Research, Inc.	200120-0	Yamanashi-ken	JAPAN	FCC
Cosmos Corporation	200151-0	Watarai-gun Mie	JAPAN	FCC
Electro. Meas. Off., Yokohama Res. & Dev. Ctr. Murata Mfg. Co.	200263-0	Kanagawa	JAPAN	FCC
EMC Kashima Corporation	200070-0	Chiba-ken	JAPAN	FCC
Fuji Buhin Kogyo Kabushiki Kaisha	200203-0	Ohta Gunma	JAPAN	Fasteners
Fujitsu Evaluation Engineering Laboratory	200281-0	Numazu, Shizuoka-Pref.	JAPAN	FCC
Fujitsu General EMC Laboratory	200373-0	Kawasaki	JAPAN	FCC
Fuserashi Gunma	200173-0	Gunma-Ken	JAPAN	Fasteners
Hitachi Information Technology Co., Ltd. Nakai Test Site	200186-0	Kanagawa	JAPAN	FCC
IBM Yamato EMC Engineering	200198-0	Yamato Kanagawa	JAPAN	FCC
IPS Corporation	200012-0	Nagano	JAPAN	FCC
Japan Quality Assurance Org. Chubu Testing Center Shikatsu Branch	200190-0	Aichi	JAPAN	FCC
Japan Quality Assurance Org. Safety Testing Ctr. Tsuru EMC Branch	200192-0	Yamanashi	JAPAN	FCC
Japan Quality Assurance Organization Kita-Kansai Testing Center	200191-0	Osaka	JAPAN	FCC
Japan Quality Assurance Organization Safety Testing Center	200189-0	Tokyo	JAPAN	FCC
Kansai Electronic Industry Development Center, Ikoma Testing Lab.	200207-0	Ikoma Nara	JAPAN	FCC
Kobelco Research Institute, Inc. Stock Company	200169-0	Kobe	JAPAN	Fasteners
Kyowa Kogyosyo Co., Ltd. Test Laboratory	200274-0	Komatsu City, Ishikawa	JAPAN	Fasteners
Matsushita EMC Center	100428-0	Taki-gun, Hyogo	JAPAN	FCC
Meidoh Laboratory	200239-0	Toyota, Aichi	JAPAN	Fasteners
Metallic Material Laboratory in Toyota Motor Co.	200223-0	Toyota city Aichi	JAPAN	Fasteners
Minebea Co., Ltd. Fujisawa Manufacturing	200229-0	Fujisawa, Kanagawa	JAPAN	Fasteners

(See 'How To Use This Directory' on page 7.)

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
Unit				
O & K Company Limited, Osaka Test Center	200166-0	Osaka-Shi	JAPAN	Fasteners
Ohtama Co., Ltd. Yamanashi EMC Test Site	200175-0	Yamanashi	JAPAN	FCC
Okai Iron Works Co., Ltd.	200299-0	Izumisano Osaka	JAPAN	Fasteners
Okawa Laboratory	200296-0	Naka-gun, Ibaraki-ken	JAPAN	Fasteners
Owari Precise Products Co., Ltd.	200227-0	Nagoya	JAPAN	Fasteners
PFU TECHNOCONSUL EMC Center	200259-0	Ishikawa-Ken	JAPAN	FCC
Ricoh Company LTD. Ohmori Acoustics Test Site	200345-0	Tokyo	JAPAN	Acoustics
Ricoh Company, Ltd. Ohmori EMC Center	200163-0	Tokyo	JAPAN	FCC
Sannohashi Corporation	200205-0	Yashioshi, Saitama-ken	JAPAN	Fasteners
Seiko Epson Corporation	200157-0	Shiojiri-City Nagano	JAPAN	FCC
Sony Atsugi EMC Site	200285-0	Shinagawa, Tokyo	JAPAN	FCC
Sony Minokamo EMC Site	200368-0	Gifu-Pref.	JAPAN	FCC
Sugiura Seisakusho Co., Ltd.	200226-0	Nishio Aichi	JAPAN	Fasteners
Sumitomo Metal Technology, Inc. Kokura Division	200215-0	Kitakyushu	JAPAN	Fasteners
TDK Corporation's 10m Anechoic Chamber and Chikumagawa Open Site	200309-0	Ichikawa-shi, Chiba-ken	JAPAN	FCC
TDK Corporation's Chikumagawa Open Site	200319-0	Saku-shi, Nagano-ken	JAPAN	FCC
TEAC Corporation EMC Center	200362-0	Iruma-shi	JAPAN	FCC
Tokin EMC Engineering Co., Ltd. Kawasaki Facility	200217-0	Kawasaki-city, Kanagawa	JAPAN	FCC
Tokin EMC Engineering Co., Ltd. Nagoya Testing Laboratory	200219-0	Daian-cho, Inabe-gun, Mie	JAPAN	FCC
Tokin EMC Engineering Co., Ltd. Osaka Testing Laboratory	200218-0	Sanda-city, Hyogo	JAPAN	FCC
Tokin EMC Engineering Co., Ltd. Tsukuba Testing Laboratory	200221-0	Tsukuba-city, Ibaraki	JAPAN	FCC
Topura Co., Ltd.	200181-0	Hadano Kanagawa	JAPAN	Fasteners
Topura Co., Ltd. Osaka	200242-0	Katano, Osaka	JAPAN	Fasteners
Topura Co., Ltd. Tokai	200243-0	Ogasagun,Shizuoka	JAPAN	Fasteners
Toshiba Corp., Ome Works	200107-0	Ome Tokyo	JAPAN	FCC
Yamaha Motor Metal Testing Laboratory Fasteners and Metals	200276-0	Iwata Shizuoka	JAPAN	Fasteners
Zacta Technology Corporation Yonezawa Testing Center	200306-0	Yonezawa-shi Yamagata	JAPAN	FCC

KOREA

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
Korea Testing & Research Inst. for Chemical Industry-Inchon Off.	200177-0	Inchon	KOREA	Fasteners
Korea Tokin EMC Engineering Co., Ltd.	200220-0	Namyangju-si, Kyunggi-Do	KOREA	FCC
LG Electronics, Inc., Quality and Reliability Center	200040-0	Seoul	KOREA	FCC

MEXICO

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
Prottsa, S.A. de C.V.	200261-0	Mexico City	MEXICO	Fasteners

TAIWAN

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
Advance Data Technology Corporation	200102-0	Taipei Hsien	TAIWAN	FCC
Electronic Research & Service Organization/ITRI	200118-0	Hsinchu	TAIWAN	FCC
Electronics Testing Center, Taiwan	200133-0	Taoyuan Hsien	TAIWAN	FCC

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
Fong Prean Industrial Co., Ltd.	200288-0	Kaohsiung Hsien	TAIWAN	Fasteners
Fwu Kuang Enterprises Co., Ltd.	200286-0	Tainan Hsien	TAIWAN	Fasteners
Global EMC Standard Tech. Corp.	200085-0	Taipei County	TAIWAN	FCC
HomeTek Technology Inc.	200331-0	Taipei Shien	TAIWAN	FCC
International Standards Laboratory	200234-0	Hsichih Chen, Taipei	TAIWAN	FCC
Neutron Engineering Inc.	200145-0	Taipei	TAIWAN	FCC
PEP Testing Laboratory	200097-0	Taipei Hsien	TAIWAN	FCC
Philips Electronics Industries (TAIWAN) Ltd.	200137-0	Chungli, Taoyuan	TAIWAN	FCC
Quietek Corporation	200347-0	Hsin-Chu City	TAIWAN	FCC
Radiation Laboratory, Taiwan Power Company	100562-0	Shihmen, Taipei	TAIWAN	Dosimetry
San Shing Hardware Works Co., Ltd. Test Laboratory	200158-0	Tainan	TAIWAN	Fasteners
Spectrum Research & Testing Laboratory, Inc.	200099-0	Chung-Li, Taoyuan	TAIWAN	FCC
Sporton International, Inc.	200079-0	Taipei Hsien	TAIWAN	FCC
Super Cheng Industrial Testing Laboratory	200280-0	Kaohsiung, Kangshan	TAIWAN	Fasteners
Taiwan Tokin EMC Eng. Corp.	200077-0	Taipei	TAIWAN	FCC
TAO/TA2 EMC Laboratory	200140-0	Taoyuan	TAIWAN	FCC
Training Research Co., Ltd.	200174-0	Taipei	TAIWAN	FCC

UNITED KINGDOM

LABORATORY NAME	NVLAP LAB CODE	CITY	STATE/ COUNTRY	FIELD
GEC Marconi Avionics Ltd Environmental and EMC Test Center	200304-0	Kent	U. K.	MIL-STD-462
National Computing Centre Ltd.	100357-0	Manchester	U. K.	GOSIP

INDEX

D

LISTING OF TESTING LABORATORIES BY NVLAP LAB CODE

NVLAP LAB CODE 100101-0

Levecque Technical Center

1400 Union Meeting Road
P.O. Box 1100
Blue Bell, PA 19422-0761
Contact: Mr. Peter Herault
Phone: 610-341-6376
Fax: 610-341-6291
E-Mail: pete.herault@CT.SGCNA.com

Thermal Insulation Materials

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Canadian Standards (Specifications)	
01/W01	CAN/CGSB-51.2-M88
01/W03	CAN/CGSB-51.10-92
01/W04	CAN/CGSB-51.11-92
01/WNOT	Scope excludes CGSB 51-GP-52M; however, ASTM E96 & ASTM D828 are included where specified in the Canadian Standards (01/W02-W04)
Corrosiveness	
01/C02	16 CFR-Part 1209.5
Flammability	
01/F01	TAPPI T461-OM
01/F05	ASTM E136
01/F07	16 CFR-Part 1209.6
01/F08	16 CFR-Part 1209.7
Mass, Density, and Dimensional Stability	
01/D01	ASTM C136
01/D02	ASTM C167
01/D08	ASTM C302
01/D09	ASTM C303
01/D11	ASTM C356
01/D12	ASTM C411
01/D24	ASTM C739 (Sec. 12)
01/D26	16 CFR-Part 1209.4
01/D27	ASTM C739 (Sec. 8)
01/D31	MIL-I-22344D (Para. 4.6.3, 4.6.4.)
Related Material Properties	
01/V04	ASTM E96
01/V07	ASTM C1104/C1104M
Strength	
01/S01b	ASTM C165 (Proc. B only)
01/S08	ASTM C446
01/S10	ASTM D828
01/S15	ASTM C421
01/S16	ASTM C1101/C1101M
Thermal Resistance	
01/T01	ASTM C177
01/T04	ASTM C236
01/T05	ASTM C335
01/T06	ASTM C518
01/T09	ASTM C653
01/T10	ASTM C687

NVLAP LAB CODE 100103-0

Dow Chemical N. America Foam Products Research, Prod. Perf. Lab.

1605 Joseph Drive
Midland, MI 48674
Contact: Ms. Linda Hess
Phone: 517-636-5069
Fax: 517-636-0194
E-Mail: lindahess@dow.com

Thermal Insulation Materials

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Mass, Density, and Dimensional Stability	
01/D07	ASTM C272
01/D18	ASTM D1622
01/D19	ASTM D2126
01/D23	ASTM D2842
Related Material Properties	
01/V04	ASTM E96
Strength	
01/S02	ASTM C203
01/S07	ASTM C273
01/S11	ASTM D1621 (Proc. A)
Thermal Resistance	
01/T06	ASTM C518

NVLAP LAB CODE 100104-0

NAHB Research Center, Inc.

400 Prince George's Boulevard
Upper Marlboro, MD 20774-8731
Contact: Mr. Thomas M. Kenney, P.E.
Phone: 301-249-4000
Fax: 301-218-8827
E-Mail: tkenney@nahbrc.org
URL: http://www.nahbrc.org

Commercial Products Testing

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Paints and Related Coatings and Materials	
09/A20	ASTM D2244
Plastics	
15/A18	ASTM D2565
15/A19	ASTM D2583
Plumbing	
19/M01	ANSI/CABO A117.1 (Sec. 4.24)
19/M02	ASME/ANSI A112.19.7M (Sec. 5, 7)
19/M03	ASME/ANSI A112.19.8M (Sec. 4, 5)
19/M04	ASTM F446
19/P01	ANSI Z124.1 (Sec. 4, 5, 6)
19/P02	ANSI Z124.2 (Sec. 4, 5, 6)
19/P03	ANSI Z124.3 (Sec. 4, 5, 6)
19/P04	ANSI Z124.4 (Sec. 4, 5)
19/P05	ANSI Z124.4 (Sec. 8) per ASME A112.19.6M (Sec. 7.1)
19/P06	ANSI/IAPMO Z124.6 (Sec. 4, 5, 6)

19/P07	ANSI/IAPMO Z124.8 (Sec. 4, 5)
19/V01	ASME A112.19.2M (Sec. 7.1)
19/V02	ASME A112.19.2M (Sec. 7.2)
19/V03	ASME A112.19.2M (Sec. 7.3)
19/V04	ASME A112.19.2M (Sec. 7.4)
19/V06	ASME A112.19.2M (Sec. 7.7)
19/W01	ASME A112.19.6 (Sec. 7.1.2)
19/W02	ASME A112.19.6 (Sec. 7.1.3)
19/W03	ASME A112.19.6 (Sec. 7.1.4)
19/W04	ASME A112.19.6 (Sec. 7.1.5)
19/W05	ASME A112.19.6 (Sec. 7.1.6)
19/W06	ASME A112.19.6 (Sec. 7.1.7)
19/W07	ASME A112.19.6 (Sec. 7.1.8)
19/W08	ASME A112.19.6 (Sec. 7.1.9)

Thermal Insulation Materials

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Mass, Density, and Dimensional Stability	
01/D02	ASTM C167
01/D13	ASTM C519
01/D27	ASTM C739 (Sec. 8)
Thermal Resistance	
01/T06	ASTM C518
01/T09	ASTM C653
01/T10	ASTM C687

NVLAP LAB CODE 100108-0

TSi, Testing Services, Inc.

817 Showalter Avenue
P.O. Box 2041
Dalton, GA 30721
Contact: Mr. Erle W. Miles, Jr.
Phone: 706-226-1400
Fax: 706-226-6118

URL: http://www.testing1-2-3.com

Carpet and Carpet Cushion

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Tests Applicable to Carpet and Carpet Cushion	
03/T01	AATCC 16 (Option E)
03/T02	ASTM D2646 (Secs. 16-24)
03/T04	16 CFR Part 1630 (FF-1-70)
Tests Applicable to Carpets	
03/G01	AATCC 20
03/G02	AATCC 20A
03/G03	AATCC 134
03/G04	AATCC 165
03/G05	ASTM D418 (Sec. 8)
03/G06	ASTM D418 (Sec. 9)
03/G07	ASTM D418 (Secs. 10-11)
03/G08	ASTM D418 (Sec. 13)
03/G09	ASTM D1335
03/G10	ASTM D3936
03/G11	ASTM D5252
03/G12	ASTM E648
03/G13	ASTM E662
03/G14	Fed Spec, DDD-C-0095A

NVLAP LAB CODE 100109-0

Owens Corning Testing Systems - Product Testing Laboratory

2790 Columbus Road, Route 16
Granville, OH 43023-1200
Contact: Mr. J. Michael Stair
Phone: 740-321-7053
Fax: 740-321-4080
E-Mail: mike.stair@owenscorning.com

Acoustical Testing Services

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P04	ASTM C522
08/P35	ASTM E1050

Thermal Insulation Materials

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Corrosiveness	
01/C01	ASTM C739 (Sec. 9)
Flammability	
01/F02	ASTM E84
01/F05	ASTM E136
01/F07	16 CFR-Part 1209.6
01/F08	16 CFR-Part 1209.7
Mass, Density, and Dimensional Stability	
01/D02	ASTM C167
01/D08	ASTM C302
01/D09	ASTM C303
01/D11	ASTM C356
01/D12	ASTM C411
01/D24	ASTM C739 (Sec. 12)
01/D27	ASTM C739 (Sec. 8)
Related Material Properties	
01/V04	ASTM E96
Strength	
01/S01a	ASTM C165 (Proc. A only)
01/S02	ASTM C203
01/S08	ASTM C446
Thermal Resistance	
01/T01	ASTM C177
01/T05	ASTM C335
01/T06	ASTM C518
01/T09	ASTM C653
01/T10	ASTM C687
01/T11	ASTM C976

NVLAP LAB CODE 100113-0

Holometrix - Micromet
25 Wiggins Avenue
Bedford, MA 01730-2323
Contact: Mr. Timothy Kunz
Phone: 781-275-3300 x245
Fax: 781-275-3705
E-Mail: info@holometrix.com
URL: http://www.holometrix.com

Thermal Insulation Materials
Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Thermal Resistance	
01/T01	ASTM C177
01/T05	ASTM C335
01/T06	ASTM C518

NVLAP LAB CODE 100120-0

Commercial Testing Company
1215 South Hamilton Street
P.O. Box 985
Dalton, GA 30722-0985
Contact: Mr. Jonathan Jackson
Phone: 706-278-3935
Fax: 706-278-3936
E-Mail: ctctest@alltel.net

Carpet and Carpet Cushion
Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Tests Applicable to Carpet Cushion	
03/U01a	ASTM D3574 (Sec. 8.2 & Test A)
03/U01b	ASTM D3676 (Secs. 10-12)
03/U02	ASTM D297
03/U06	ASTM D1667 (Suffix B)
03/U07	ASTM D3574 (Test C)
03/U08	ASTM D3574 (Test D)
03/U09	ASTM D3574 (Test E)
03/U10	ASTM D3676 (Sec.13)
03/U11	ASTM D3676 (Sec.14)
03/U12	ASTM D3676 (Sec.15)
03/U13	ASTM D3676 (Sec.16)
Tests Applicable to Carpet and Carpet Cushion	
03/T01	AATCC 16 (Option E)
03/T02	ASTM D2646 (Secs. 16-24)
03/T03	ASTM E84
03/T04	16 CFR Part 1630 (FF-1-70)
Tests Applicable to Carpets	
03/G03	AATCC 134
03/G04	AATCC 165
03/G05	ASTM D418 (Sec. 8)
03/G06	ASTM D418 (Sec. 9)
03/G07	ASTM D418 (Secs. 10-11)
03/G08	ASTM D418 (Sec. 13)
03/G09	ASTM D1335
03/G10	ASTM D3936
03/G12	ASTM E648
03/G13	ASTM E662

NVLAP LAB CODE 100139-0

American Carpet Laboratories, Inc.
7517 Nashville Street
P.O. Box 357
Ringgold, GA 30736
Contact: Mr. Michael D. Connell
Phone: 706-935-5672
Fax: 706-891-5713

Carpet and Carpet Cushion
Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Tests Applicable to Carpet Cushion	
03/U01b	ASTM D3676 (Secs. 10-12)
03/U02	ASTM D297
03/U08	ASTM D3574 (Test D)
03/U10	ASTM D3676 (Sec.13)
03/U12	ASTM D3676 (Sec.15)
03/U13	ASTM D3676 (Sec.16)
Tests Applicable to Carpet and Carpet Cushion	
03/T01	AATCC 16 (Option E)
03/T02	ASTM D2646 (Secs. 16-24)
03/T04	16 CFR Part 1630 (FF-1-70)
Tests Applicable to Carpets	
03/G01	AATCC 20
03/G02	AATCC 20A
03/G04	AATCC 165
03/G05	ASTM D418 (Sec. 8)
03/G06	ASTM D418 (Sec. 9)
03/G07	ASTM D418 (Secs. 10-11)
03/G08	ASTM D418 (Sec. 13)
03/G09	ASTM D1335
03/G10	ASTM D3936
03/G12	ASTM E648
03/G13	ASTM E662
03/G14	Fed Spec, DDD-C-0095A

NVLAP LAB CODE 100142-0

Geoscience Ltd.
6260-B Marindustry Drive
San Diego, CA 92121
Contact: Dr. H. F. Poppendiek
Phone: 619-453-5483
Fax: 619-453-4694

Thermal Insulation Materials
Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Flammability	
01/F05	ASTM E136
Thermal Resistance	
01/T01	ASTM C177
01/T04	ASTM C236

NVLAP LAB CODE 100146-0

American Testing Laboratories, Inc.

784 Flory Mill Road
P.O. Box 4014
Lancaster, PA 17604-4014
Contact: Mr. John S. Kassees
Phone: 717-569-0488
Fax: 717-569-3429

Construction Materials Testing

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Aggregates	
02/A03	ASTM C29
02/A04	ASTM C40
02/A06	ASTM C88
02/A07	ASTM C117
02/A09	ASTM C127
02/A10	ASTM C128
02/A11	ASTM C131
02/A12	ASTM C136
02/A44	ASTM C566
02/A46	ASTM C535
Cement	
02/A51	ASTM C780 (Annex A7)
02/A52	ASTM C1019
Concrete	
02/A01	ASTM C39
02/A02	ASTM C617
02/A41	ASTM C192
02/A43	ASTM C1064
02/A45	ASTM C42
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173
Soil and Rock	
02/L02	ASTM D422
02/L04	ASTM D698
02/L05	ASTM D854
02/L06	ASTM D1140
02/L08	ASTM D1557
02/L11	ASTM D2166
02/L13	ASTM D2216
02/L16	ASTM D2487
02/L17	ASTM D2488
02/L20	ASTM D4318
02/L23	ASTM D2922
02/L25	ASTM D3017

NVLAP LAB CODE 100156-0

Mohawk Industries, Inc.- Lyerly Plant

Route 1, Box 32, Highway 114
Lyerly, GA 30730
Contact: Mr. Richard Turner
Phone: 706-895-3341 x6250
Fax: 706-895-2346

Carpet and Carpet Cushion

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Tests Applicable to Carpet and Carpet Cushion	
03/T01	AATCC 16 (Option E)
03/T02	ASTM D2646 (Secs. 16-24)
03/T04	16 CFR Part 1630 (FF-1-70)
Tests Applicable to Carpets	
03/G04	AATCC 165
03/G05	ASTM D418 (Sec. 8)
03/G06	ASTM D418 (Sec. 9)
03/G07	ASTM D418 (Secs. 10-11)
03/G08	ASTM D418 (Sec. 13)
03/G09	ASTM D1335
03/G10	ASTM D3936

NVLAP LAB CODE 100166-0

Independent Textile Testing Service, Inc.

1503 Murray Avenue, P.O. Box 1948
Dalton, GA 30722-1948
Contact: Mr. L. Kent Suddeth
Phone: 706-278-3013
Fax: 706-272-7057
E-Mail: ittslab@dalton.net
URL: ittslab.com

Carpet and Carpet Cushion

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Tests Applicable to Carpet Cushion	
03/U01a	ASTM D3574 (Sec. 8.2 & Test A)
03/U01b	ASTM D3676 (Secs. 10-12)
03/U02	ASTM D297
03/U03	ASTM D629 (Sec. 10)
03/U04	ASTM D629 (Secs. 13-22)
03/U05	ASTM D629 (Secs. 23-27)
03/U06	ASTM D1667 (Suffix B)
03/U07	ASTM D3574 (Test C)
03/U08	ASTM D3574 (Test D)
03/U09	ASTM D3574 (Test E)
03/U10	ASTM D3676 (Sec.13)
03/U11	ASTM D3676 (Sec.14)
03/U12	ASTM D3676 (Sec.15)
03/U13	ASTM D3676 (Sec.16)
Tests Applicable to Carpet and Carpet Cushion	
03/T01	AATCC 16 (Option E)
03/T02	ASTM D2646 (Secs. 16-24)
03/T04	16 CFR Part 1630 (FF-1-70)

Tests Applicable to Carpets	
03/G01	AATCC 20
03/G02	AATCC 20A
03/G03	AATCC 134
03/G04	AATCC 165
03/G05	ASTM D418 (Sec. 8)
03/G06	ASTM D418 (Sec. 9)
03/G07	ASTM D418 (Secs. 10-11)
03/G08	ASTM D418 (Sec. 13)
03/G09	ASTM D1335
03/G10	ASTM D3936
03/G11	ASTM D5252
03/G12	ASTM E648
03/G13	ASTM E662
03/G14	Fed Spec, DDD-C-0095A

NVLAP LAB CODE 100190-0

Beaulieu of America - Carpet Testing Lab

1502 Coronet Drive
P.O. Box 1248
Dalton, GA 30722-1248
Contact: Mr. E. Ronald Vinyard
Phone: 706-259-4511 x7367
Fax: 706-259-2211 x7893

Carpet and Carpet Cushion

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Tests Applicable to Carpet and Carpet Cushion	
03/T01	AATCC 16 (Option E)
03/T02	ASTM D2646 (Secs. 16-24)
03/T04	16 CFR Part 1630 (FF-1-70)
Tests Applicable to Carpets	
03/G04	AATCC 165
03/G05	ASTM D418 (Sec. 8)
03/G06	ASTM D418 (Sec. 9)
03/G07	ASTM D418 (Secs. 10-11)
03/G08	ASTM D418 (Sec. 13)
03/G09	ASTM D1335
03/G10	ASTM D3936

NVLAP LAB CODE 100191-0

STS Consultants, Ltd.

750 Corporate Woods Parkway
Vernon Hills, IL 60061
Contact: Mr. William P. Quinn
Phone: 847-279-2500
Fax: 847-279-2550
E-Mail: quinn@stsltd.com

Construction Materials Testing

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Aggregates	
02/A03	ASTM C29
02/A04	ASTM C40
02/A06	ASTM C88
02/A07	ASTM C117
02/A09	ASTM C127
02/A10	ASTM C128
02/A11	ASTM C131
02/A12	ASTM C136
02/A13	ASTM C142
02/A15	ASTM D75
02/A46	ASTM C535
Cement	
02/A17	ASTM C109
Concrete	
02/A01	ASTM C39
02/A02	ASTM C617
02/A40	ASTM C78
02/A41	ASTM C192
02/A45	ASTM C42
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173
Road and Paving Materials	
02/M03	ASTM D140
02/M09	ASTM D1074
02/M11	ASTM D1188
02/M12	ASTM D1559
02/M19	ASTM D2172
02/M24	ASTM D2041
02/M25	ASTM D2726
Soil and Rock	
02/L02	ASTM D422
02/L03	ASTM D427
02/L04	ASTM D698
02/L05	ASTM D854
02/L06	ASTM D1140
02/L08	ASTM D1557
02/L10	ASTM D1883
02/L11	ASTM D2166
02/L13	ASTM D2216
02/L15	ASTM D2435
02/L16	ASTM D2487
02/L17	ASTM D2488
02/L18	ASTM D3080
02/L20	ASTM D4318
02/L21	ASTM D2434
02/L22	ASTM D2850
02/L23	ASTM D2922
02/L24	ASTM D2974
02/L26	ASTM D4221
02/L29	Corps of Engineers - Manual EM-1110-2-1906, Appendix VII, Permeability of Fine Grained Soils Using a Triaxial Apparatus
02/L30	Corps of Engineers - Manual EM-1110-2-1906, Appendix X, Consolidated Undrained and Consolidated Drained Triaxial Test
02/L46	ASTM D5084
Standard Practices	
02/A38	ASTM E329
02/A39	ASTM C1077
02/L32	ASTM D3740
02/M26	ASTM D3666

NVLAP LAB CODE 100193-0

Shaw Industries, Inc., Central Laboratory Operations
South Glenwood Avenue
P.O. Box 2128
Dalton, GA 30722-2128
Contact: Mr. Jerry T. Wright, Jr.
Phone: 706-275-2205
Fax: 706-275-2221
E-Mail: jay.wright@shawinc.com

Carpet and Carpet Cushion

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Tests Applicable to Carpet and Carpet Cushion	
03/T01	AATCC 16 (Option E)
03/T02	ASTM D2646 (Secs. 16-24)
03/T04	16 CFR Part 1630 (FF-1-70)
Tests Applicable to Carpets	
03/G04	AATCC 165
03/G06	ASTM D418 (Sec. 9)
03/G07	ASTM D418 (Secs. 10-11)
03/G08	ASTM D418 (Sec. 13)
03/G09	ASTM D1335
03/G10	ASTM D3936
03/G12	ASTM E648
03/G13	ASTM E662

NVLAP LAB CODE 100197-0

World Carpets, Inc.
One World Plaza
P.O. Box 1448
Dalton, GA 30720-1448
Contact: Mr. Wayne Murdock
Phone: 706-278-8000
Fax: 706-278-4982
E-Mail: worldtechlab@juno.com

Carpet and Carpet Cushion

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Tests Applicable to Carpet and Carpet Cushion	
03/T01	AATCC 16 (Option E)
03/T02	ASTM D2646 (Secs. 16-24)
03/T04	16 CFR Part 1630 (FF-1-70)
Tests Applicable to Carpets	
03/G04	AATCC 165
03/G06	ASTM D418 (Sec. 9)
03/G07	ASTM D418 (Secs. 10-11)
03/G08	ASTM D418 (Sec. 13)
03/G09	ASTM D1335
03/G10	ASTM D3936

NVLAP LAB CODE 100210-0

Flexible Products Company
2050 North Broadway
Joliet, IL 60435-3187
Contact: Mr. Robert Braun
Phone: 815-774-6500 x1560
Fax: 815-774-6522
E-Mail: rbraun@flexpro.com

Thermal Insulation Materials

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Mass, Density, and Dimensional Stability	
01/D15	ASTM D756 (Proc. A)
01/D16	ASTM D756 (Proc. B)
01/D17	ASTM D756 (Proc. E)
01/D18	ASTM D1622
01/D19	ASTM D2126
01/D23	ASTM D2842
Related Material Properties	
01/V04	ASTM E96
Strength	
01/S02	ASTM C203
01/S07	ASTM C273
01/S11	ASTM D1621 (Proc. A)
Thermal Resistance	
01/T06	ASTM C518

NVLAP LAB CODE 100227-0

Riverbank Acoustical Laboratories
1512 S. Batavia Avenue
P.O. Box 189
Geneva, IL 60134-3302
Contact: Mr. John W. Kopec
Phone: 630-232-0104
Fax: 630-232-0138
E-Mail: ral@imaxx.net

Acoustical Testing Services

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P05	ASTMC523
08/P06	ASTM E90 (ISO 140, Part 3)
08/P07	ASTM E492
08/P10	ANSI S12.31 (ISO 3741)
08/P30	ASTM E1408
08/P39	ANSI S12.5 (ISO 6926)

NVLAP LAB CODE 100228-0

Armstrong Acoustic Labs, Armstrong World Ind., Inc. Innov. Center

P.O. Box 3511
2500 Columbia Avenue
Lancaster, PA 17604
Contact: Mr. Robert Alan Hallman
Phone: 717-396-6225
Fax: 717-396-5865
E-Mail: Robert_A_Hallman@armstrong.com

Acoustical Testing Services

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P07	ASTM E492
08/P28	ASTM E1375
08/P29	ASTM E1376
08/P33	ASTM E1111
08/P34	ASTM E1414 (AMA-1-II-67)(ISO 140, Part 9)

NVLAP LAB CODE 100239-0

Hufcor Laboratory

1017 South Jackson Street
P.O. Box 591
Janesville, WI 53547-0591
Contact: Mr. Todd A. Williams
Phone: 608-758-8329
Fax: 608-758-8300
E-Mail: twilliams@hufcor.com

Acoustical Testing Services

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
08/P06	ASTM E90 (ISO 140, Part 3)
08/P31	ASTM E336

NVLAP LAB CODE 100247-0

Hollytex Carpet Mills, Inc.

505 N.E. 7th
P.O. Box 369
Anadarko, OK 73005-2299
Contact: Ms. Carla McCathern
Phone: 405-247-7453
Fax: 405-247-9303

Carpet and Carpet Cushion

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Tests Applicable to Carpet and Carpet Cushion	
03/T01	AATCC 16 (Option E)
03/T04	16 CFR Part 1630 (FF-1-70)
Tests Applicable to Carpets	
03/G04	AATCC 165
03/G09	ASTM D1335
03/G10	ASTM D3936

NVLAP LAB CODE 100248-0

Knauf Fiber Glass Research Laboratory

240 Elizabeth Street
Shelbyville, IN 46176-1496
Contact: Mr. Timothy R. Jonas
Phone: 317-398-4434
Fax: 317-398-3675

Thermal Insulation Materials

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Mass, Density, and Dimensional Stability	
01/D02	ASTM C167
01/D08	ASTM C302
01/D09	ASTM C303
01/D11	ASTM C356
01/D12	ASTM C411
01/D13	ASTM C519
Strength	
01/S01a	ASTM C165 (Proc. A only)
Thermal Resistance	
01/T01	ASTM C177
01/T05	ASTM C335
01/T06	ASTM C518
01/T09	ASTM C653
01/T10	ASTM C687

NVLAP LAB CODE 100251-0

St. of California, Bur. of Home Furnishings & Thermal Insulation

3485 Orange Grove Avenue
North Highlands, CA 95660-5595
Contact: Dr. Stephen J. Fischer
Phone: 916-574-2060
Fax: 916-574-2449

Thermal Insulation Materials

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Corrosiveness	
01/C01	ASTM C739 (Sec. 9)
01/C02	16 CFR-Part 1209.5
Flammability	
01/F07	16 CFR-Part 1209.6
01/F08	16 CFR-Part 1209.7
01/F09	ASTM C739 (Sec. 10)
01/F10	ASTM C739 (Sec. 14)
Mass, Density, and Dimensional Stability	
01/D02	ASTM C167
01/D08	ASTM C302
01/D09	ASTM C303
01/D26	16 CFR-Part 1209.4

01/D27	ASTM C739 (Sec. 8)

Thermal Resistance

01/T01	ASTM C177
01/T05	ASTM C335

NVLAP LAB CODE 100252-0

D/L Laboratories

116 East 16th Street
New York, NY 10003-2174
Contact: Mr. Saul Spindel
Phone: 212-777-4445
Fax: 212-505-8419
E-Mail: dllabs@aol.com

Commercial Products Testing

Accreditation Valid Through: December 31, 1999

Building Seals and Sealants

NVLAP Code	*Designation*
13/O01	ASTM C510
13/O02a	ASTM C603
13/O02b	CAN2-19.0-M77, Meth. 3.1
13/O03	ASTM C639
13/O04a	ASTM C661
13/O04b	CAN2-19.0-M77, Meth. 8.1
13/O05a	ASTM C679
13/O05b	CAN2-19.0-M77, Meth. 2.1
13/O06	ASTM C681
13/O07	ASTM C711
13/O08	ASTM C712
13/O09	ASTM C713
13/O10	ASTM C718
13/O11a	ASTM C719
13/O11b	CAN2-19.0-M77, Meth. 14.4
13/O12	ASTM C731
13/O13	ASTM C732
13/O14	ASTM C733
13/O15	ASTM C734
13/O16	ASTM C736
13/O17	ASTM C741
13/O18	ASTM C742
13/O19a	ASTM C792
13/O19b	CAN2-19.0-M77, Meth. 5.1
13/O20	ASTM C793
13/O21	ASTM C794
13/O22	ASTM C910
13/O23	ASTM D2202
13/O24	ASTM D2203
13/O25	ASTM D2376
13/O26	ASTM D2377
13/O27	ASTM D2450
13/O28	ASTM D2451
13/O29	ASTM D2452
13/O30	ASTM D2453
13/O31	CAN2-19.0-M77, Meth. 7.1
13/O32	CAN2-19.0-M77, Meth. 7.3
13/O33	CAN2-19.0-M77, Meth. 8.2
13/O34	CAN2-19.0-M77, Meth. 11.1
13/O35	CAN2-19.0-M77, Meth. 14.7
13/O36	CAN2-19.0-M77, Meth. 19.2
13/O37	ASTM C920
13/O38	ASTM C1241
13/O39	ASTM C1183
13/O40	ASTM C1246
13/O41	CAN2-19.0-M77, Meth. 9.1
13/O42	CAN2-19.0-M77, Meth. 9.2
13/O43	CAN2-19.0-M77, Meth. 14.6
13/O44	CAN2-19.0-M77, Meth. 18.2
13/O45	ASTM C834

Paints and Related Coatings and Materials

09/A01	ASTM D56
09/A02	ASTM D93 (Method A)
09/A03	ASTM D153
09/A04	ASTM D185
09/A05	ASTM D281
09/A07	ASTM D523
09/A08	ASTM D562
09/A09	ASTM D1005
09/A10	ASTM D1186
09/A11	ASTM D1200
09/A12	ASTM D1210
09/A13	ASTM D1212 (Method A)
09/A14	ASTM D1296
09/A15	ASTM D1310
09/A16	ASTM D1400
09/A17	ASTM D1475
09/A18	ASTM D1544
09/A19	ASTM D1729
09/A20	ASTM D2244
09/A21	ASTM D3278
09/A22	ASTM D3363
09/A23	ASTM D3793
09/A25	ASTM D4212
09/A26	ASTM E1347
09/A28	ASTM E313
09/A30	CGSB Method 1-GP-71, Meth. 10.1
09/A31	CGSB Method 1-GP-71, Meth. 12.8
09/A32	CGSB Method 1-GP-71, Meth. 45.1
09/A33	ASTM D2196
09/B02	ASTM D332
09/B03	ASTM D344
09/B04	ASTM D610
09/B05	ASTM D4214
09/B06	ASTM D660
09/B07	ASTM D661
09/B08	ASTM D662
09/B09	ASTM D711
09/B10	ASTM D714
09/B11	ASTM D772
09/B12	ASTM D868
09/B13a	ASTM D968
09/B13b	CGSB Method 1-GP-71 Meth. 104.1
09/B14	ASTM D869
09/B15	ASTM D870
09/B16	ASTM D913
09/B18	ASTM D969
09/B19a	ASTM D1308
09/B19b	CGSB Method 1-GP-71, Meth. 105.1
09/B19c	CGSB Method 1-GP-71, Meth. 106.1
09/B19d	CGSB Method 1-GP-71, Meth. 107.1
09/B19e	CGSB Method 1-GP-71, Meth. 110.1
09/B20	ASTM D1309
09/B23	ASTM D1640

09/B24	ASTM D522
09/B25	ASTM D2197
09/B26	ASTM D2243
09/B27	ASTM D2248
09/B29	ASTM D2486
09/B31	ASTM D2805
09/B32	ASTM D3273
09/B33	ASTM D3274
09/B34	ASTM D3450
09/B37	ASTM D4060
09/B38	ASTM D4062
09/B39	ASTM D4213
09/B41	Fed. Std. 141, Method 4494
09/B42	Fed. Std. 141, Method 4061
09/B43	ASTM D3359
09/B44	ASTM D4828
09/B45	CGSB Method 1-GP-71, Meth. 14.1
09/B46a	ASTM D1849
09/B46b	CGSB Method 1-GP-71, Meth. 30.3
09/B47	CGSB Method 1-GP-71, Meth. 32.1
09/B48	CGSB Method 1-GP-71, Meth. 37.3
09/B49	CGSB Method 1-GP-71, Meth. 112.2
09/B50	CGSB Method 1-GP-71, Meth. 114.1
09/B51	CGSB Method 1-GP-71, Meth. 116.2
09/B52	CGSB Method 1-GP-71, Meth. 123.2
09/B53	CGSB Method 1-GP-71, Meth. 125.1
09/B54	CGSB Method 1-GP-71, Meth. 127.1
09/B55	CGSB Method 1-GP-71, Meth. 130.1
09/B56	CGSB Method 1-GP-71, Meth. 131.2
09/B57	CGSB Method 1-GP-71, Meth. 132.1
09/B58	CGSB Method 1-GP-71, Meth. 134.1
09/B59	CGSB Method 1-GP-71, Meth. 135.1
09/B59	CGSB Method 1-GP-71, Meth. 135.1
09/B60	CGSB Method 1-GP-71, Meth. 142.1
09/B61	ASTM D412
09/B62	ASTM D1653
09/B63	ASTM D2134
09/B64	ASTM D2370
09/B65	ASTM D3258
09/B66	ASTM D3806
09/B67	ASTM D4400
09/B68	ASTM D4541
09/B69	ASTM D4707
09/B70	ASTM D4946
09/B71	ASTM D2794
09/C07	ASTM D1133
09/C09	ASTM D1259
09/C11	ASTM D1353
09/C12	ASTM D1364
09/C22	ASTM D1644
09/C26a	ASTM D2369
09/C26b	CGSB Method 1-GP-71, Meth. 17.1
09/C26c	CGSB Method 1-GP-71, Meth. 19.1
09/C27	ASTM D2371
09/C28	ASTM D2697
09/C29	ASTM D2698
09/C30	ASTM D2832
09/C37	ASTM D3723
09/C39	ASTM D3960
09/C40	ASTM D4017
09/C42	CGSB Method 1-GP-71, Meth. 21.1
09/C43	CGSB Method 1-GP-71, Meth. 24.1
09/C44	ASTM D5095
09/C45	CGSB Method 1-GP-71, Meth. 69.3
09/D01	ASTM B117
09/D02	ASTM D609
09/D03	ASTM D822
09/D04	ASTM D823 (Limited to Practices B, C, D and E)
09/D05	ASTM D1006
09/D06	ASTM D1014
09/D07	ASTM D1654
09/D13	ASTM D3924
09/D14	ASTM G23
09/D16	ASTM G53
09/D17	ASTM D4446
09/D18	ASTM D5401
Plastics	
15/A26	ASTM D2240

NVLAP LAB CODE 100255-0

Underwriters Laboratories, Inc.
1285 Walt Whitman Road
Melville, NY 11747-3081
Contact: Mr. Jim Beyreis
Phone: 847-272-8800
Fax: 847-272-8129

URL: http://www.ul.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T41	TS-001
12/T42	TS-002
12/T44	TS-004
12/T45	TS-006
12/T46	TS-008
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T50	AS/NZS 3260
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards

12/T01c	68.302 Environmental simulation (Par. a,b)
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 100256-0

Western Electro-Acoustic Lab., Inc.

1711 16th Street
Santa Monica, CA 90404
Contact: Mr. Gary E. Mange
Phone: 310-450-1733
Fax: 310-396-3424
E-Mail: gmange@veneklasen-assoc.com

Acoustical Testing Services

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P06	ASTM E90 (ISO 140, Part 3)
08/P31	ASTM E336
08/P32	ASTM E1007

NVLAP LAB CODE 100259-0

MacMillan Bloedel Packaging, Inc., Combined Board Test Lab

Highway 10 East
P.O. Box 336
Pine Hill, AL 36769-5336
Contact: Mr. Don White
Phone: 334-963-4391
Fax: 334-963-4887

Commercial Products Testing

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Paper and Related Products	
09/E02	TAPPI T402-OM; ASTM D685
09/E05	TAPPI T410-OM
09/E06	TAPPI T411-OM
09/E07	TAPPI T412-OM; ASTM D644
09/E08	TAPPI T414-OM
09/E12	TAPPI T459-OM; ASTM D2482
09/E13	TAPPI T460-OM; ASTM D726
09/E20	TAPPI T809-OM
09/E22	TAPPI T807-OM
09/E25	TAPPI T826-PM
09/E30	TAPPI T822-OM
09/H01	ASTM D642; TAPPI T804-OM
09/H26	TAPPI UM-807
09/H28	TAPPI T810-OM
09/H29	TAPPI T811-OM
09/H30	TAPPI T821-OM
09/H31	TAPPI T825-PM

NVLAP LAB CODE 100261-0

Resources, Applications, Designs & Control, Inc. (RADCO)

3220 E. 59th Street
Long Beach, CA 90805-4502
Contact: Mr. Michael L. Zieman, P.E.
Phone: 562-272-7231
Fax: 562-529-7513
E-Mail: Mzieman@Radcoinc.com

Thermal Insulation Materials

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Mass, Density, and Dimensional Stability	
01/D07	ASTM C272
01/D09	ASTM C303
01/D19	ASTM D2126
Related Material Properties	
01/V04	ASTM E96
Strength	
01/S02	ASTM C203
01/S10	ASTM D828
01/S11	ASTM D1621 (Proc. A)
Thermal Resistance	
01/T06	ASTM C518

NVLAP LAB CODE 100267-0

Retlif Testing Laboratories

795 Marconi Avenue
Ronkonkoma, NY 11779-7231
Contact: Mr. Ross A. Hansen
Phone: 516-737-1500
Fax: 516-737-1497
E-Mail: rhansen@retlif.com
URL: http://www.retlif.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T42	TS-002
12/T43	TS-003
12/T44	TS-004
12/T45	TS-006
12/T46	TS-008
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 -

	Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

MIL-STD-462 Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A01	MIL-STD-462 Method CE01
12/A04	MIL-STD-462 Method CE02
12/A06	MIL-STD-462 Method CE03
12/A08	MIL-STD-462 Method CE04
12/A12	MIL-STD-462 Method CE07
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B05	MIL-STD-462 Method CS06
12/B08	MIL-STD-462 Method CS10
12/B09	MIL-STD-462 Method CS11
Radiated Emissions:	
12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
Radiated Susceptibility:	
12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)
12/E05	MIL-STD-462 Method RS05
12/E07	MIL-STD-462 Method RS06

NVLAP LAB CODE 100267-1

Retlif Testing Laboratories

101 New Boston Road
Goffstown, NH 03045
Contact: John Monahan
Phone: 603-497-4600
Fax: 603-497-5281

URL: http://www.retlif.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 100268-0

TUV Product Service, Inc.

10040 Mesa Rim Road
San Diego, CA 92121-1034
Contact: Mr. Floyd R. Fleury
Phone: 619-546-3999
Fax: 619-546-0364
E-Mail: cfleury@TUVps.com
URL: http://www.tuvps.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

MIL-STD-462 Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A01	MIL-STD-462 Method CE01
12/A04	MIL-STD-462 Method CE02
12/A06	MIL-STD-462 Method CE03
12/A08	MIL-STD-462 Method CE04

12/A10	MIL-STD-462 Method CE06
12/A12	MIL-STD-462 Method CE07

Conducted Susceptibility:

12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B04	MIL-STD-462 Method CS03/CS04/CS05/CS08
12/B05	MIL-STD-462 Method CS06
12/B06	MIL-STD-462 Method CS07
12/B07	MIL-STD-462 Method CS09

Radiated Emissions:

12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
12/D03	MIL-STD-462 Method RE03

Radiated Susceptibility:

12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E03	MIL-STD-462 Method RS03 (Consult laboratory for field strengths available)
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)

NVLAP LAB CODE 100269-0

Intermec Technologies Corporation, Norand Mobile System Division

550 Second Street S.E.
Cedar Rapids, IA 52401
Contact: Mr. Cedric Brownfield
Phone: 319-846-2415
Fax: 319-846-2475
E-Mail: brownfieldcn@norand.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

Australian Standards referred to by clauses in AUSTEL Technical Standards

NVLAP Code	*Designation*
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

NVLAP Code	*Designation*
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

NVLAP Code	*Designation*
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 100270-0

Intertek Testing Services NA Inc.

70 Codman Hill Road
Boxborough, MA 01719
Contact: Mr. Roland W. Gubisch
Phone: 978-635-8500
Fax: 978-263-7086
E-Mail: rwg@itsqs.com
URL: http://www.worldlab.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

AUSTEL Technical Standards as determined under the Telecommunications Act of 1991

NVLAP Code	*Designation*
12/T41	TS-001
12/T42	TS-002
12/T43	TS-003
12/T44	TS-004
12/T45	TS-006
12/T46	TS-008
12/T49	TS-016

Australian Standards referred to by clauses in AUSTEL Technical Standards

NVLAP Code	*Designation*
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

NVLAP Code	*Designation*
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)

International Special Committee on Radio Interference (CISPR) Methods

NVLAP Code	*Designation*
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

MIL-STD-462 Test Methods

Accreditation Valid Through: September 30, 1999

Conducted Emissions:

NVLAP Code	*Designation*
12/A01	MIL-STD-462 Method CE01
12/A04	MIL-STD-462 Method CE02

12/A06	MIL-STD-462 Method CE03
12/A08	MIL-STD-462 Method CE04
12/A10	MIL-STD-462 Method CE06
12/A12	MIL-STD-462 Method CE07
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B04	MIL-STD-462 Method CS03/CS04/CS05/CS08
12/B05	MIL-STD-462 Method CS06
12/B06	MIL-STD-462 Method CS07
12/B07	MIL-STD-462 Method CS09
12/B08	MIL-STD-462 Method CS10
12/B09	MIL-STD-462 Method CS11
12/B10	MIL-STD-462 Method CS12
12/B11	MIL-STD-462 Method CS13
Radiated Emissions:	
12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
12/D03	MIL-STD-462 Method RE03
Radiated Susceptibility:	
12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E03	MIL-STD-462 Method RS03 (Consult laboratory for field strengths available)
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)
12/E05	MIL-STD-462 Method RS05
12/E07	MIL-STD-462 Method RS06

NVLAP LAB CODE 100271-0

TUV Product Service, Inc.

1775 Old Hwy. 8 NW, Suite 104
New Brighton, MN 55112-1891
Contact: Mr. Timothy P. O'Shea
Phone: 651-631-2487
Fax: 651-638-0285
E-Mail: toshea@tuvps.com
URL: http://www.tuvps.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T41	TS-001
12/T46	TS-008
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T50	AS/NZS 3260
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

MIL-STD-462 Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A01	MIL-STD-462 Method CE01
12/A04	MIL-STD-462 Method CE02
12/A06	MIL-STD-462 Method CE03
12/A08	MIL-STD-462 Method CE04
12/A12	MIL-STD-462 Method CE07
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B05	MIL-STD-462 Method CS06
12/B07	MIL-STD-462 Method CS09
Radiated Emissions:	
12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
Radiated Susceptibility:	
12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E03	MIL-STD-462 Method RS03 (Consult laboratory for field strengths available)
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)
12/E07	MIL-STD-462 Method RS06

NVLAP LAB CODE 100271-1

TUV Product Service, Inc.

5541 Central Avenue
Boulder, CO 80301-2846
Contact: Jeff Doolittle
Phone: 303-402-5241
Fax: 303-449-3004
E-Mail: jdoolittle@tuvps.com
URL: http://www.tuvps.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100272-0

Communication Certification Laboratory

1940 West Alexander Street
Salt Lake City, UT 84119-2039
Contact: Mr. William S. Hurst
Phone: 801-972-6146
Fax: 801-972-8432
E-Mail: wsh@cclab.com
URL: http://www.cclab.com/

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T41	TS-001
12/T42	TS-002
12/T43	TS-003
12/T44	TS-004
12/T45	TS-006
12/T46	TS-008
12/T49	TS-016
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)

NVLAP LAB CODE 100273-0

MET Laboratories, Inc.

914 W. Patapsco Avenue
Baltimore, MD 21230-3432
Contact: Mr. Robert Frier
Phone: 410-354-3300
Fax: 410-354-3313
E-Mail: rfrier@metlabs.com
URL: http://www.metlabs.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T41	TS-001
12/T42	TS-002
12/T43	TS-003
12/T44	TS-004
12/T45	TS-006
12/T46	TS-008
12/T49	TS-016
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T50	AS/NZS 3260
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100274-0

Intertek Testing Services NA Inc.

731 Enterprise Drive
Lexington, KY 40510-1029
Contact: Mr. Clifford Eugene Jones,
Phone: 606-226-1060
Fax: 606-225-1050
E-Mail: Cliff@TestMark.com
URL: http://www.testmark.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T41	TS-001
12/T42	TS-002
12/T43	TS-003
12/T44	TS-004
12/T45	TS-006
12/T46	TS-008
12/T49	TS-016
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T50	AS/NZS 3260
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100275-0

Lucent Technologies, Global Product Compliance Lab

101 Crawfords Corner Road, M/S 11C-195
P.O. Box 3030
Holmdel, NJ 07733-3030
Contact: Mr. E. Gardner Burkhardt
Phone: 732-332-6001
Fax: 732-332-5999
E-Mail: egburkhardt@lucent.com
URL: http://www.gpcl.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T41	TS-001
12/T42	TS-002
12/T44	TS-004
12/T45	TS-006
12/T46	TS-008
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100276-0

D.L.S. Electronic Systems, Inc.

1250 Peterson Drive
Wheeling, IL 60090-6454
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Phone: 847-537-6400
Fax: 847-537-6488
E-Mail: bmattson@dlsemc.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices

12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100278-0

Elite Electronic Engineering Company

1516 Centre Circle
Downers Grove, IL 60515-1082
Contact: Mr. Raymond Klouda
Phone: 630-495-9770
Fax: 630-495-9785
E-Mail: engineering@elitetest.com
URL: http://www.elitetest.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)

MIL-STD-462 Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A01	MIL-STD-462 Method CE01
12/A04	MIL-STD-462 Method CE02
12/A06	MIL-STD-462 Method CE03
12/A08	MIL-STD-462 Method CE04
12/A10	MIL-STD-462 Method CE06
12/A12	MIL-STD-462 Method CE07
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B04	MIL-STD-462 Method CS03/CS04/CS05/CS08
12/B05	MIL-STD-462 Method CS06
12/B06	MIL-STD-462 Method CS07
12/B07	MIL-STD-462 Method CS09
12/B08	MIL-STD-462 Method CS10
12/B09	MIL-STD-462 Method CS11
12/B10	MIL-STD-462 Method CS12
12/B11	MIL-STD-462 Method CS13
Radiated Emissions:	
12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
12/D03	MIL-STD-462 Method RE03
Radiated Susceptibility:	
12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)
12/E05	MIL-STD-462 Method RS05
12/E07	MIL-STD-462 Method RS06

NVLAP LAB CODE 100280-0

R & B Enterprises

20 Clipper Road
West Conshohocken, PA 19428-2721
Contact: Mr. Rohit Vohra
Phone: 610-825-1960
Fax: 610-825-1684
E-Mail: rvohra@RBitem.com
URL: www.RBitem.com

MIL-STD-462 Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A01	MIL-STD-462 Method CE01
12/A06	MIL-STD-462 Method CE03
12/A10	MIL-STD-462 Method CE06
12/A12	MIL-STD-462 Method CE07
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B05	MIL-STD-462 Method CS06
12/B06	MIL-STD-462 Method CS07
12/B07	MIL-STD-462 Method CS09
12/B08	MIL-STD-462 Method CS10
12/B09	MIL-STD-462 Method CS11
12/B10	MIL-STD-462 Method CS12
12/B11	MIL-STD-462 Method CS13
Radiated Emissions:	
12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
Radiated Susceptibility:	
12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)
12/E05	MIL-STD-462 Method RS05

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

NVLAP LAB CODE 100286-0

Acoustic Systems Acoustical Research Facility

415 East St. Elmo Road
P.O. Box 3610
Austin, TX 78764
Contact: Mr. Michael C. Black
Phone: 512-444-1961
Fax: 512-444-2282
E-Mail: acoustic@inetport.com

Acoustical Testing Services

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P06	ASTM E90 (ISO 140, Part 3)
08/P08	ASTM E596
08/P10	ANSI S12.31 (ISO 3741)
08/P24	ANSI S12.10 (ISO 7779)
08/P35	ASTM E1050

NVLAP LAB CODE 100288-0

Bentley Testing Laboratory

14641 E. Don Julian Road
P.O. Box 527
City of Industry, CA 91746-3106
Contact: Ms. Sandy Kolby
Phone: 626-333-4585 x2253
Fax: 626-333-4125
E-Mail: Sandy_Kolby@mail.ifsia.com

Carpet and Carpet Cushion

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Tests Applicable to Carpet Cushion	
03/U01a	ASTM D3574 (Sec. 8.2 & Test A)
03/U02	ASTM D297
03/U07	ASTM D3574 (Test C)
03/U08	ASTM D3574 (Test D)
03/U10	ASTM D3676 (Sec.13)
Tests Applicable to Carpet and Carpet Cushion	
03/T01	AATCC 16 (Option E)
03/T04	16 CFR Part 1630 (FF-1-70)
Tests Applicable to Carpets	
03/G04	AATCC 165
03/G05	ASTM D418 (Sec. 8)
03/G06	ASTM D418 (Sec. 9)
03/G07	ASTM D418 (Secs. 10-11)
03/G08	ASTM D418 (Sec. 13)
03/G09	ASTM D1335
03/G10	ASTM D3936
03/G12	ASTM E648
03/G13	ASTM E662

NVLAP LAB CODE 100290-0

Akzo Kashima Ltd., Kashima EMC Site

1 Oaza Sunayama, Hasaki, Kashima-gun
Ibaraki 314-02
JAPAN
Contact: Mr. Shuichi Kobayashi
Phone: +81-479-40-1097
Fax: +81-479-46-1788
E-Mail: shuichi.kobayashi@nifty.ne.jp

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 100290-2

Akzo Kashima Ltd. Kakegawa EMC Test Site

322 Shimotaruki, Kakegawa
Shizuoka 436-0222
JAPAN
Contact: Seiji Matsuda
Phone: +81-837-24-8191
Fax: +81-537-24-8193
E-Mail: akzoemc2@sb3.so-net.or.jp

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz

	to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100290-3

Akzo Kashima Ltd., Nagano EMC Test Site

3226 Yokokawa, Tatsuno, Kamina-gun
Nagano 399-0511
JAPAN
Contact: Yoshio Kowase
Phone: +81-266-47-5311
Fax: +81-266-47-5540
E-Mail: akzoemc3@sb3.so-net.or.jp

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100290-4

Akzo Kashima Ltd., Matsuda EMC Test Site

1283 Yadorigi, Matsuda, Ashigarakami-gun
Kanagawa 258-0001
JAPAN
Contact: Hideki Hayashi
Phone: +81-465-89-2316
Fax: +81-465-89-2160
E-Mail: akzoemc5@sb3.so-net.or.jp

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100290-5

Akzo Kashima Ltd., Tochigi EMC Test Site

870 Nakaawano, Awano, Kamitsuga-gun
Tochigi 322-0306
JAPAN
Contact: Kazuharu Yanagisawa
Phone: +81-289-86-7121
Fax: +81-289-86-7126
E-Mail: akzoemc6@sb3.so-net.or.jp

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100296-0

Chomerics Test Services (CTS)

77 Dragon Court
Woburn, MA 01888-4014
Contact: Mr. David C. Inman
Phone: 781-935-4850
Fax: 781-935-2758
E-Mail: mpack@chomerics.com
URL: http://www.chomericstest.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 100297-0

Professional Testing Laboratory, Inc.

714 Glenwood Place
Dalton, GA 30721
Contact: Mr. Greg Phillips
Phone: 706-226-3283
Fax: 706-226-6787

Carpet and Carpet Cushion

Accreditation Valid Through: June 30, 1999

Tests Applicable to Carpet Cushion

NVLAP Code	*Designation*
03/U01a	ASTM D3574 (Sec. 8.2 & Test A)
03/U01b	ASTM D3676 (Secs. 10-12)
03/U02	ASTM D297
03/U03	ASTM D629 (Sec. 10)
03/U04	ASTM D629 (Secs. 13-22)
03/U05	ASTM D629 (Secs. 23-27)
03/U06	ASTM D1667 (Suffix B)
03/U07	ASTM D3574 (Test C)
03/U08	ASTM D3574 (Test D)
03/U09	ASTM D3574 (Test E)
03/U10	ASTM D3676 (Sec.13)
03/U11	ASTM D3676 (Sec.14)
03/U12	ASTM D3676 (Sec.15)
03/U13	ASTM D3676 (Sec.16)

Tests Applicable to Carpet and Carpet Cushion

03/T01	AATCC 16 (Option E)
03/T02	ASTM D2646 (Secs. 16-24)
03/T04	16 CFR Part 1630 (FF-1-70)

Tests Applicable to Carpets

03/G01	AATCC 20
03/G02	AATCC 20A
03/G03	AATCC 134
03/G04	AATCC 165
03/G05	ASTM D418 (Sec. 8)
03/G06	ASTM D418 (Sec. 9)
03/G07	ASTM D418 (Secs. 10-11)
03/G08	ASTM D418 (Sec. 13)
03/G09	ASTM D1335
03/G10	ASTM D3936
03/G11	ASTM D5252
03/G12	ASTM E648
03/G13	ASTM E662

NVLAP LAB CODE 100308-0

Special Testing Laboratories, Inc.

21 Henry Street
P.O. Box 200
Bethel, CT 06801-0200
Contact: Mr. Richard Speciale
Phone: 203-743-7281
Fax: 203-791-2451

Construction Materials Testing

Accreditation Valid Through: December 31, 1999

Aggregates

NVLAP Code	*Designation*
02/A03	ASTM C29
02/A04	ASTM C40
02/A06	ASTM C88
02/A07	ASTM C117
02/A09	ASTM C127
02/A10	ASTM C128
02/A11	ASTM C131
02/A12	ASTM C136
02/A15	ASTM D75
02/A15	ASTM D75
02/A44	ASTM C566

Concrete

02/A01	ASTM C39
02/A02	ASTM C617
02/A41	ASTM C192
02/A43	ASTM C1064
02/A45	ASTM C42
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173

Road and Paving Materials

02/M25	ASTM D2726

Soil and Rock

02/L02	ASTM D422
02/L04	ASTM D698
02/L06	ASTM D1140
02/L07	ASTM D1556
02/L08	ASTM D1557
02/L09	ASTM D1558
02/L12	ASTM D2168
02/L13	ASTM D2216
02/L16	ASTM D2487
02/L17	ASTM D2488
02/L20	ASTM D4318
02/L23	ASTM D2922
02/L25	ASTM D3017
02/L31	ASTM D2167

Standard Practices

02/A38	ASTM E329
02/A39	ASTM C1077

Steel Materials

02/S02	ASTM A370 (Sec. 14)/E190

02/S07	ASTM E709
02/S08	ASTM E165

NVLAP LAB CODE 100315-0

Eastern Materials Testing Lab a division of Jaworski Geotech

One Hartford Square #19
New Britain, CT 06052
Contact: Mr. Kevin J. Brigandi
Phone: 860-224-3316
Fax: 860-229-9567
E-Mail: emtl@connix.com
URL: http://www.jgi-geo.com

Construction Materials Testing

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Aggregates	
02/A03	ASTM C29
02/A04	ASTM C40
02/A06	ASTM C88
02/A07	ASTM C117
02/A09	ASTM C127
02/A10	ASTM C128
02/A12	ASTM C136
Cement	
02/A17	ASTM C109
02/A30	ASTM C266
Concrete	
02/A01	ASTM C39
02/A02	ASTM C617
02/A41	ASTM C192
02/A43	ASTM C1064
02/A45	ASTM C42
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173
Soil and Rock	
02/L02	ASTM D422
02/L04	ASTM D698
02/L06	ASTM D1140
02/L08	ASTM D1557
02/L12	ASTM D2168
02/L13	ASTM D2216
02/L16	ASTM D2487
02/L20	ASTM D4318
02/L23	ASTM D2922
02/L25	ASTM D3017
02/L31	ASTM D2167
Standard Practices	
02/A38	ASTM E329
02/A39	ASTM C1077

NVLAP LAB CODE 100316-0

Independent Materials Testing Laboratories, Inc.

57 N. Washington Street
P.O. Box 745
Plainville, CT 06062-0745
Contact: Mr. David P. Aiudi
Phone: 203-525-7193
Fax: 203-747-6455

Construction Materials Testing

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Aggregates	
02/A03	ASTM C29
02/A04	ASTM C40
02/A06	ASTM C88
02/A07	ASTM C117
02/A08	ASTM C123
02/A09	ASTM C127
02/A10	ASTM C128
02/A11	ASTM C131
02/A12	ASTM C136
02/A13	ASTM C142
02/A15	ASTM D75
02/A44	ASTM C566
02/A46	ASTM C535
Cement	
02/A26	ASTM C191
02/A31	ASTM C305
Concrete	
02/A01	ASTM C39
02/A02	ASTM C617
02/A40	ASTM C78
02/A41	ASTM C192
02/A43	ASTM C1064
02/A45	ASTM C42
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173
Geotextiles	
02/L28	ASTM D4354
Road and Paving Materials	
02/M08	ASTM D979
02/M11	ASTM D1188
02/M19	ASTM D2172
02/M24	ASTM D2041
02/M25	ASTM D2726
Soil and Rock	
02/L01	ASTM D4220
02/L02	ASTM D422
02/L04	ASTM D698
02/L05	ASTM D854
02/L06	ASTM D1140
02/L07	ASTM D1556
02/L08	ASTM D1557
02/L10	ASTM D1883
02/L11	ASTM D2166
02/L12	ASTM D2168

02/L13	ASTM D2216
02/L14	ASTM D2217
02/L16	ASTM D2487
02/L17	ASTM D2488
02/L20	ASTM D4318
02/L21	ASTM D2434
02/L24	ASTM D2974
02/L25	ASTM D3017
02/L29	Corps of Engineers - Manual EM-1110-2-1906, Appendix VII, Permeability of Fine Grained Soils Using a Triaxial Apparatus
Standard Practices	
02/A38	ASTM E329
02/A39	ASTM C1077
Steel Materials	
02/S07	ASTM E709
02/S08	ASTM E165

NVLAP LAB CODE 100317-0

Fairfield Testing Laboratory, Inc.

652 Glenbrook Road, P.O. 2310
Stamford, CT 06906
Contact: Mr. James E. Quill
Phone: 203-372-1980
Fax: 203-372-1898
E-Mail: JQuill@aol.com

Construction Materials Testing

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Aggregates	
02/A12	ASTM C136
Concrete	
02/A01	ASTM C39
02/A02	ASTM C617
02/A43	ASTM C1064
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173
Soil and Rock	
02/L08	ASTM D1557
02/L23	ASTM D2922
02/L25	ASTM D3017

NVLAP LAB CODE 100319-0

PSI, Inc.

55 State Street
North Haven, CT 06473
Contact: Mr. Ted Swenson
Phone: 203-239-3353
Fax: 203-239-3453

Construction Materials Testing

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Aggregates	
02/A04	ASTM C40
02/A07	ASTM C117
02/A09	ASTM C127
02/A10	ASTM C128
02/A11	ASTM C131
02/A12	ASTM C136
02/A44	ASTM C566
Concrete	
02/A01	ASTM C39
02/A43	ASTM C1064
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173
Soil and Rock	
02/L04	ASTM D698
02/L05	ASTM D854
02/L06	ASTM D1140
02/L07	ASTM D1556
02/L08	ASTM D1557
02/L12	ASTM D2168
02/L23	ASTM D2922
02/L25	ASTM D3017
Standard Practices	
02/A38	ASTM E329
02/A39	ASTM C1077

NVLAP LAB CODE 100320-0

Materials Testing, Inc.

200 Rowe Avenue
Milford, CT 06460
Contact: Mr. Frank A. Soucy
Phone: 203-878-2765
Fax: 208-878-1504

Construction Materials Testing

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Aggregates	
02/A03	ASTM C29
02/A04	ASTM C40
02/A06	ASTM C88
02/A07	ASTM C117
02/A08	ASTM C123
02/A09	ASTM C127
02/A10	ASTM C128
02/A11	ASTM C131
02/A12	ASTM C136
Cement	
02/A17	ASTM C109
Concrete	
02/A01	ASTM C39
02/A02	ASTM C617
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173
Soil and Rock	
02/L02	ASTM D422
02/L04	ASTM D698
02/L05	ASTM D854

(See 'How To Use This Directory' on page 7.)

02/L06	ASTM D1140
02/L08	ASTM D1557
02/L13	ASTM D2216
02/L23	ASTM D2922
02/L31	ASTM D2167

NVLAP LAB CODE 100322-0

Canadian Standards Association

178 Rexdale Boulevard
Etobicoke Ontario M9W 1R3
CANADA
Contact: Mr. Doug Geralde
Phone: 416-747-4295
Fax: 416-747-4287
E-Mail: gerladed@csa.ca

Commercial Products Testing

Accreditation Valid Through: March 31, 1999

Plumbing

NVLAP Code	*Designation*
19/F01	ASME A112.18.1M (Sec. 5.2)
19/F02	ASME A112.18.1M (Sec. 5.14)
19/F03	ASME A112.18.1M (Sec. 6.2)
19/F04	ASME A112.18.1M (Sec. 6.4)
19/F05	ASME A112.18.1M (Sec. 6.5)
19/F06	ASME A112.18.1M (Sec. 6.6)
19/F07	ASME A112.18.1M (Sec. 6.7)
19/F08	ASME A112.18.1M (Sec. 6.8)
19/F09	ASME A112.18.1M (Sec. 5.13)
19/F10	ASME A112.18.1M (Sec. 6.3)
19/M01	ANSI/CABO A117.1 (Sec. 4.24)
19/M02	ASME/ANSI A112.19.7M (Sec. 5, 7)
19/M03	ASME/ANSI A112.19.8M (Sec. 4, 5)
19/M04	ASTM F446
19/P01	ANSI Z124.1 (Sec. 4, 5, 6)
19/P02	ANSI Z124.2 (Sec. 4, 5, 6)
19/P03	ANSI Z124.3 (Sec. 4, 5, 6)
19/P04	ANSI Z124.4 (Sec. 4, 5)
19/P05	ANSI Z124.4 (Sec. 8) per ASME A112.19.6M (Sec. 7.1)
19/P06	ANSI/IAPMO Z124.6 (Scc. 4, 5, 6)
19/P07	ANSI/IAPMO Z124.8 (Scc. 4, 5)
19/U01	ASME/ANSI A112.18.3M (Sec. 5.1, 12.1, 12.2, 13, 14, 16)
19/V01	ASME A112.19.2M (Sec. 7.1)
19/V02	ASME A112.19.2M (Sec. 7.2)
19/V03	ASME A112.19.2M (Sec. 7.3)
19/V04	ASME A112.19.2M (Sec. 7.4)
19/V05	ASME A112.19.2M (Sec. 7.5)
19/V06	ASME A112.19.2M (Sec. 7.7)
19/W01	ASME A112.19.6 (Sec. 7.1.2)
19/W02	ASME A112.19.6 (Sec. 7.1.3)
19/W03	ASME A112.19.6 (Sec. 7.1.4)
19/W04	ASME A112.19.6 (Sec. 7.1.5)
19/W05	ASME A112.19.6 (Sec. 7.1.6)
19/W06	ASME A112.19.6 (Sec. 7.1.7)
19/W07	ASME A112.19.6 (Sec. 7.1.8)
19/W08	ASME A112.19.6 (Sec. 7.1.9)

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100323-0

IBM Hudson Valley Acoustics Laboratory

Building 704, M/S P226
522 South Road
Poughkeepsie, NY 12601-5400
Contact: Dr. Matthew A. Nobile
Phone: 914-435-4959
Fax: 914-432-9880
E-Mail: nobile@us.ibm.com

Acoustical Testing Services

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P10	ANSI S12.31 (ISO 3741)
08/P13	ANSI S12.32 (ISO 3742)
08/P21	ISO 3745
08/P24	ANSI S12.10 (ISO 7779)
08/P38	ANSI S12.11
08/P39	ANSI S12.5 (ISO 6926)

NVLAP LAB CODE 100325-0

City of San Jose, Materials Testing Laboratory

696 North 6th Street, Building 200
San Jose, CA 95112-3208
Contact: Mr. Alberto C. Oxonian
Phone: 408-277-4513
Fax: 408-275-8090

Construction Materials Testing

Accreditation Valid Through: December 31, 1999

Aggregates

NVLAP Code	*Designation*
02/A03	ASTM C29
02/A04	ASTM C40

02/A06	ASTM C88
02/A07	ASTM C117
02/A09	ASTM C127
02/A10	ASTM C128
02/A11	ASTM C131
02/A12	ASTM C136
02/A13	ASTM C142
02/A15	ASTM D75
02/A16	ASTM D2419
02/A44	ASTM C566

Cement

02/A17	ASTM C109
02/A22	ASTM C183
02/A52	ASTM C1019

Concrete

02/A01	ASTM C39
02/A02	ASTM C617
02/A40	ASTM C78
02/A41	ASTM C192
02/A42	ASTM C360
02/A43	ASTM C1064
02/A45	ASTM C42
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173

Road and Paving Materials

02/M01	ASTM D5
02/M03	ASTM D140
02/M05	ASTM D244
02/M07	ASTM D546
02/M08	ASTM D979
02/M09	ASTM D1074
02/M11	ASTM D1188
02/M12	ASTM D1559
02/M13	ASTM D1560
02/M14	ASTM D1561
02/M15	ASTM D1856
02/M17	ASTM D2170
02/M18	ASTM D2171
02/M19	ASTM D2172
02/M20	ASTM D2872
02/M24	ASTM D2041
02/M25	ASTM D2726

Soil and Rock

02/L02	ASTM D422
02/L05	ASTM D854
02/L06	ASTM D1140
02/L08	ASTM D1557
02/L12	ASTM D2168
02/L13	ASTM D2216
02/L14	ASTM D2217
02/L16	ASTM D2487
02/L20	ASTM D4318
02/L23	ASTM D2922
02/L25	ASTM D3017
02/L47	ASTM D2844

Standard Practices

02/A38	ASTM E329
02/A39	ASTM C1077
02/L32	ASTM D3740
02/M26	ASTM D3666

NVLAP LAB CODE 100339-0

Data General Corporation

4400 Computer Drive
Westboro, MA 01580
Contact: Mr. Joseph DeMonaco
Phone: 508-898-6051
Fax: 508-898-5413
E-Mail: Joe_Demonaco@dg.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

Australian Standards referred to by clauses in AUSTEL Technical Standards

NVLAP Code	*Designation*
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

NVLAP Code	*Designation*
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

NVLAP Code	*Designation*
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 100340-0

Fairway Testing Company, Inc.

Smith Street
P.O. Box 578
Stony Point, NY 10980
Contact: Mr. Patsy J. Aguanno
Phone: 914-942-2088
Fax: 914-942-0995

Construction Materials Testing

Accreditation Valid Through: September 30, 1999

Aggregates

NVLAP Code	*Designation*
02/A03	ASTM C29
02/A04	ASTM C40
02/A06	ASTM C88
02/A07	ASTM C117
02/A08	ASTM C123
02/A09	ASTM C127
02/A10	ASTM C128
02/A12	ASTM C136
02/A13	ASTM C142
02/A15	ASTM D75
02/A16	ASTM D2419
02/A44	ASTM C566

Concrete

02/A01	ASTM C39
02/A02	ASTM C617
02/A40	ASTM C78
02/A41	ASTM C192
02/A43	ASTM C1064
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173

Road and Paving Materials

02/M01	ASTM D5
02/M07	ASTM D546
02/M08	ASTM D979
02/M11	ASTM D1188
02/M12	ASTM D1559
02/M15	ASTM D1856
02/M19	ASTM D2172
02/M24	ASTM D2041
02/M25	ASTM D2726

Soil and Rock

02/L01	ASTM D4220
02/L02	ASTM D422
02/L04	ASTM D698
02/L05	ASTM D854
02/L06	ASTM D1140
02/L07	ASTM D1556
02/L08	ASTM D1557
02/L13	ASTM D2216
02/L16	ASTM D2487
02/L17	ASTM D2488
02/L20	ASTM D4318
02/L21	ASTM D2434
02/L23	ASTM D2922
02/L25	ASTM D3017
02/L29	Corps of Engineers - Manual EM-1110-2-1906, Appendix VII, Permeability of Fine Grained Soils Using a Triaxial Apparatus

Standard Practices

02/A38	ASTM E329
02/A39	ASTM C1077
02/L32	ASTM D3740
02/M26	ASTM D3666

Steel Materials

02/S02	ASTM A370 (Sec. 14)/E190
02/S07	ASTM E709
02/S08	ASTM E165

NVLAP LAB CODE 100347-0

Acton Environmental Testing, dba National Technical Systems

1146 Massachusetts Avenue
Boxborough, MA 01719
Contact: Mr. James Press
Phone: 978-266-1001
Fax: 978-266-1073

MIL-STD-462 Test Methods

Accreditation Valid Through: March 31, 1999

Conducted Emissions:

NVLAP Code	*Designation*
12/A01	MIL-STD-462 Method CE01
12/A04	MIL-STD-462 Method CE02
12/A06	MIL-STD-462 Method CE03
12/A08	MIL-STD-462 Method CE04
12/A12	MIL-STD-462 Method CE07

Conducted Susceptibility:

12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B05	MIL-STD-462 Method CS06
12/B07	MIL-STD-462 Method CS09

Radiated Emissions:

12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02

Radiated Susceptibility:

12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E03	MIL-STD-462 Method RS03 (Consult laboratory for field strengths available)
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)
12/E07	MIL-STD-462 Method RS06

NVLAP LAB CODE 100350-0

Northern Telecom Product Integrity Labs.

21 Richardson Side Road
Kanata Ontario K2K 2C1
CANADA
Contact: Mr. Rick McDonald
Phone: 613-763-2475
Fax: 613-763-8091
E-Mail: McD@nortel.ca

FCC Test Methods

Accreditation Valid Through: June 30, 1999

Australian Standards referred to by clauses in AUSTEL Technical Standards

NVLAP Code	*Designation*
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power

	limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 100351-0

KTL Ottawa Inc.

3325 River Road, R.R. No. 5
Ottawa Ontario K1V 1H2
CANADA
Contact: Mr. Marc Beisheim
Phone: 613-737-9680
Fax: 613-737-9691
E-Mail: KTL@KTLCanada.com
URL: http://www.ktl.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

AUSTEL Technical Standards as determined under the Telecommunications Act of 1991

NVLAP Code	*Designation*
12/T41	TS-001
12/T42	TS-002
12/T43	TS-003
12/T44	TS-004
12/T45	TS-006
12/T46	TS-008
12/T49	TS-016

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 100354-0

Control Data Accredited OSI Test Center

4201 Lexington Avenue North
Arden Hills, MN 55126-6198
Contact: Mr. Ronald D. Swan
Phone: 612-415-4659
Fax: 612-415-3879
E-Mail: Ronald.D.Swan@cdc.com

GOSIP

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
17/G03	ITU X.400-1984 MHS: P2/P1/RTS/(Session)
17/G21	ITU X.400-1988 MHS
17/G21a	ITU X.400-1988 MHS: P2/P1/RTSE/ACSE/Presentation (Session)
17/G23	ITU-T X.500-1988 DS: Directory Services-Directory Access Protocol

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NVLAP LAB CODE 100357-0

National Computing Centre Ltd.

Oxford Road
Manchester, M17ED
UNITED KINGDOM
Contact: Mrs. A. E. J. Pink
Phone: +44 1 61 242-2257
Fax: +44 1 61 236-9877
E-Mail: jane@ncc.co.uk

GOSIP

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
17/G01	ISO/IEC 8571/8650/8823: FTAM/ACSE/Presentation (Session)
17/G03	ITU X.400-1984 MHS: P2/P1/RTS/(Session)
17/G05	ISO/IEC 8327: Session
17/G07	ISO/IEC 8073: Transport Class 4
17/G09	ISO/IEC 8073: Transport Class 2/Transport Class 0
17/G11	
17/G11a	ISO/IEC 8473: Connectionless Network Protocol (CLNP)
17/G11b	ISO/IEC 9542: End System-Intermediate System (ES-IS)
17/G19	ITU X.25: PLP/HDLC LAP B
17/G21	ITU X.400-1988 MHS
17/G21a	ITU X.400-1988 MHS: P2/P1/RTSE/ACSE/Presentation (Session)
17/G21b	ITU X.400-1988 MHS: P3
17/G21c	ITU X.400-1988 MHS: P3/ROSE

(See 'How To Use This Directory' on page 7.)

17/G21d	ITU X.400-1988 MHS: P7
17/G21e	ITU X.400-1988 MHS: P7/ROSE
17/G23	ITU-T X.500-1988 DS: Directory Services-Directory Access Protocol

NVLAP LAB CODE 100374-0

Aearo Company, E·A·RCAL Acoustical Laboratory

7911 Zionsville Road
Indianapolis, IN 46268-1657
Contact: Mr. Elliott H. Berger
Phone: 317-692-3031
Fax: 317-692-3116
E-Mail: eberger@compuserve.com
URL: http://www.e-a-r.com

Acoustical Testing Services

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
08/P26	ANSI S3.19 (ANSI S3.19-1974)
08/P27	ANSI S12.6

NVLAP LAB CODE 100382-0

Eaton E3 Laboratory

26201 Northwestern Highway
P.O. Box 766
Southfield, MI 48037-0766
Contact: Mr. Kimball Williams
Phone: 248-354-2845
Fax: 248-208-2018
E-Mail: k.williams@ieee.org

MIL-STD-462 Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A01	MIL-STD-462 Method CE01
12/A04	MIL-STD-462 Method CE02
12/A06	MIL-STD-462 Method CE03
12/A08	MIL-STD-462 Method CE04
12/A12	MIL-STD-462 Method CE07
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B05	MIL-STD-462 Method CS06
12/B07	MIL-STD-462 Method CS09
Radiated Emissions:	
12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
Radiated Susceptibility:	
12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E03	MIL-STD-462 Method RS03 (Consult laboratory for field strengths available)
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)
12/E07	MIL-STD-462 Method RS06

NVLAP LAB CODE 100396-0

Criterion Technology

1350 County Road #16
P.O. Box 387
Rollinsville, CO 80474
Contact: Mr. R. Barry Wallen
Phone: 303-682-6600
Fax: 303-682-6672
E-Mail: b.wallen@criteriontech.com
URL: www.criteriontech.com

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100398-0

GE Lighting- Engineering Support - NA

1975 Noble Road
Nela Park
Cleveland, OH 44112-6300
Contact: Mr. Arthur H. Lupfer
Phone: 216-266-2365
Fax: 216-266-6986
E-Mail: Arthur.Lupfer@lighting.ge.com

Energy Efficient Lighting Products

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Color Measurements	
22/C01	IES LM-58
Electrical Measurements	
22/E01	IES LM-9
22/E02	IES LM-45
22/E03	IES LM-51
22/E04	IES LM-66
22/E05	ANSI-C78.375
Life Tests	
22/L01	IES LM-40
22/L03	IES LM-49
22/L04	IES LM-65

(See 'How To Use This Directory' on page 7.)

Photometric Measurements	
22/P01a	IES LM-9 (Total Flux)
22/P01b	IES LM-9 (Intensity)
22/P02a	IES LM-20 (Total Flux)
22/P02b	IES LM-20 (Intensity)
22/P03a	IES LM-45 (Total Flux)
22/P03b	IES LM-45 (Intensity)
22/P04a	IES LM-51 (Total Flux)
22/P05a	IES LM-66 (Total Flux)
22/P05b	IES LM-66 (Intensity)

NVLAP LAB CODE 100399-0

Philips Lighting Corporate Calibration & Standards Laboratory

Route 3, P.O. Box 505, Hoult Road
Fairmont, WV 26554-9484
Contact: Dr. Ronald Gibbons
Phone: 304-367-7608
Fax: 304-367-7602
E-Mail: jltfccsl@ussmlt61.snads.philips.nl

Energy Efficient Lighting Products

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Color Measurements	
22/C01	IES LM-58
Electrical Measurements	
22/E01	IES LM-9
22/E02	IES LM-45
22/E03	IES LM-51
22/E04	IES LM-66
22/E05	ANSI-C78.375
22/E06	ANSI-C78.386
22/E07	ANSI-C78.387
22/E08	ANSI-C78.388
Photometric Measurements	
22/P01a	IES LM-9 (Total Flux)
22/P02a	IES LM-20 (Total Flux)
22/P02b	IES LM-20 (Intensity)
22/P03a	IES LM-45 (Total Flux)
22/P03b	IES LM-45 (Intensity)
22/P04a	IES LM-51 (Total Flux)
22/P05a	IES LM-66 (Total Flux)

NVLAP LAB CODE 100402-0

Intertek Testing Services NA Inc.

3933 U.S. Route 11
Cortland, NY 13045-0950
Contact: Mr. Craig Davenport
Phone: 607-758-6296
Fax: 607-756-9891
E-Mail: cdavenport@itsqs.com
URL: http://www.worldlab.com

Energy Efficient Lighting Products

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Color Measurements	
22/C01	IES LM-58
Electrical Measurements	
22/E01	IES LM-9
22/E02	IES LM-45
22/E03	IES LM-51
22/E04	IES LM-66
22/E05	ANSI-C78.375
22/E06	ANSI-C78.386
22/E07	ANSI-C78.387
22/E08	ANSI-C78.388
Life Tests	
22/L03	IES LM-49
Photometric Measurements	
22/P01a	IES LM-9 (Total Flux)
22/P02a	IES LM-20 (Total Flux)
22/P03a	IES LM-45 (Total Flux)
22/P03b	IES LM-45 (Intensity)
22/P04a	IES LM-51 (Total Flux)
22/P05a	IES LM-66 (Total Flux)
22/P05b	IES LM-66 (Intensity)

Thermal Insulation Materials

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Flammability	
01/F02	ASTM E84
Thermal Resistance	
01/T06	ASTM C518

NVLAP LAB CODE 100403-0

Osram Sylvania Inc., Test & Measurements Laboratory

71 Cherry Hill Dr.
Beverly, MA 01915
Contact: Dr. Ronald O. Daubach
Phone: 508-750-1593
Fax: 508-750-1794
E-Mail: daubach@osi.sylvania.com

Energy Efficient Lighting Products

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Color Measurements	
22/C01	IES LM-58
Electrical Measurements	
22/E01	IES LM-9
22/E02	IES LM-45
22/E03	IES LM-51
22/E04	IES LM-66
22/E05	ANSI-C78.375
22/E06	ANSI-C78.386
22/E07	ANSI-C78.387
22/E08	ANSI-C78.388
Life Tests	
22/L01	IES LM-40
22/L02	IES LM-47
22/L03	IES LM-49

22/L04	IES LM-65

Photometric Measurements

22/P01a	IES LM-9 (Total Flux)
22/P01b	IES LM-9 (Intensity)
22/P02a	IES LM-20 (Total Flux)
22/P02b	IES LM-20 (Intensity)
22/P03a	IES LM-45 (Total Flux)
22/P03b	IES LM-45 (Intensity)
22/P04a	IES LM-51 (Total Flux)
22/P04b	IES LM-51 (Intensity)
22/P05a	IES LM-66 (Total Flux)
22/P05b	IES LM-66 (Intensity)

NVLAP LAB CODE 100404-0

Industrial Acoustics Company, Inc., Aero-Acoustics Laboratory

1160 Commerce Avenue
Bronx, NY 10462
Contact: Mr. Jon Weinstein
Phone: 718-931-8000
Fax: 718-863-1138

Acoustical Testing Services

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
08/P02	ASTM C384
08/P03	ASTM C423 (ISO 354)
08/P04	ASTMC522
08/P06	ASTM E90 (ISO 140, Part 3)
08/P08	ASTM E596
08/P30	ASTM E1408
08/P36	ASTM E477

NVLAP LAB CODE 100405-0

Motorola SSTG EMC/TEMPEST Laboratory

8201 E. McDowell Road
Scottsdale, AZ 85252
Contact: Mr. Dwayne R. Awerkamp
Phone: 602-441-3138
Fax: 602-441-3625
E-Mail: p09969@email.mot.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

MIL-STD-462 Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*

Conducted Emissions:

12/A01	MIL-STD-462 Method CE01
12/A04	MIL-STD-462 Method CE02
12/A06	MIL-STD-462 Method CE03
12/A08	MIL-STD-462 Method CE04
12/A10	MIL-STD-462 Method CE06
12/A12	MIL-STD-462 Method CE07

Conducted Susceptibility:

12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B04	MIL-STD-462 Method CS03/CS04/CS05/CS08
12/B05	MIL-STD-462 Method CS06
12/B06	MIL-STD-462 Method CS07
12/B07	MIL-STD-462 Method CS09
12/B08	MIL-STD-462 Method CS10
12/B09	MIL-STD-462 Method CS11
12/B10	MIL-STD-462 Method CS12
12/B11	MIL-STD-462 Method CS13

Radiated Emissions:

12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
12/D03	MIL-STD-462 Method RE03

Radiated Susceptibility:

12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E03	MIL-STD-462 Method RS03 (Consult laboratory for field strengths available)
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)
12/E05	MIL-STD-462 Method RS05
12/E07	MIL-STD-462 Method RS06

NVLAP LAB CODE 100406-0

Inland Foundation Engineering, Inc.

1310 South Santa Fe Avenue
P.O. Box 937
San Jacinto, CA 92581-0937
Contact: Mr. Donald O. Swenson
Phone: 909-654-1555
Fax: 909-654-0551

Construction Materials Testing

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Aggregates	
02/A03	ASTM C29
02/A04	ASTM C40
02/A06	ASTM C88
02/A07	ASTM C117
02/A09	ASTM C127
02/A10	ASTM C128
02/A11	ASTM C131
02/A12	ASTM C136
02/A15	ASTM D75
02/A16	ASTM D2419
02/A44	ASTM C566
02/A46	ASTM C535
Concrete	
02/A01	ASTM C39
02/A02	ASTM C617
02/A41	ASTM C192
02/A43	ASTM C1064
02/A45	ASTM C42
02/G01	ASTM C31/C172/C143/C138/C231
Road and Paving Materials	
02/M08	ASTM D979
02/M11	ASTM D1188
02/M13	ASTM D1560
02/M14	ASTM D1561
02/M25	ASTM D2726
Soil and Rock	
02/L01	ASTM D4220
02/L02	ASTM D422
02/L04	ASTM D698
02/L05	ASTM D854
02/L06	ASTM D1140
02/L07	ASTM D1556
02/L08	ASTM D1557
02/L16	ASTM D2487
02/L18	ASTM D3080
02/L20	ASTM D4318
02/L21	ASTM D2434
02/L23	ASTM D2922
02/L25	ASTM D3017
02/L47	ASTM D2844
Standard Practices	
02/A38	ASTM E329
02/A39	ASTM C1077
02/L32	ASTM D3740
02/M26	ASTM D3666

NVLAP LAB CODE 100408-0

NAWC AD 5.1.7.3. EMI Lab

48298 Shaw Road, Unit 4, Bldg. 1461
Patuxent River, MD 20670-1900
Contact: Mr. Robert Smith
Phone: 301-342-0851
Fax: 301-342-5390
E-Mail: smithRB@navair.navy.mil

MIL-STD-462 Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A01	MIL-STD-462 Method CE01
12/A04	MIL-STD-462 Method CE02
12/A06	MIL-STD-462 Method CE03
12/A08	MIL-STD-462 Method CE04
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B05	MIL-STD-462 Method CS06
Radiated Emissions:	
12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
Radiated Susceptibility:	
12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E03	MIL-STD-462 Method RS03 (Consult laboratory for field strengths available)
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)

NVLAP LAB CODE 100409-0

Intertek Testing Services NA Inc.

4317-A Park Drive N.W.
Norcross, GA 30093-2968
Contact: Mr. David C. Dennis
Phone: 770-925-2444
Fax: 770-925-7294
E-Mail: ddennis@itsqs.com
URL: http://www.worldlab.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T41	TS-001
12/T42	TS-002
12/T44	TS-004
12/T45	TS-006
12/T46	TS-008
12/T49	TS-016

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T50	AS/NZS 3260
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 100411-0

Northern Telecom Inc.

2305 Mission College Boulevard
P.O. Box 58173
Santa Clara, CA 95052-8173
Contact: Mr. Kenneth Dorn
Phone: 408-565-2186
Fax: 408-565-2575
E-Mail: ken.dorn@nt.com

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP
Code *Designation*

AUSTEL Technical Standards as determined under the Telecommunications Act of 1991

12/T41	TS-001
12/T42	TS-002
12/T43	TS-003
12/T44	TS-004
12/T45	TS-006
12/T49	TS-016

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T50	AS/NZS 3260
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 100413-0

Digital Regulatory Engineering and Testing Services

200 Forest Street, Mail Stop MRO1-D
Marlboro, MA 01752-3085
Contact: Ms. Diane Montvitt
Phone: 508-467-2851
Fax: 508-467-2846

URL: http://www.digital.com/regulatory

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP
Code *Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100414-0

Underwriters Laboratories Inc.

333 Pfingsten Road
Northbrook, IL 60062-2096
Contact: Mr. Rick A. Titus
Phone: 847-272-8800 x43281
Fax: 847-509-6219
E-Mail: titusr@ul.com
URL: http://www.ul.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

Thermal Insulation Materials

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Corrosiveness	
01/C01	ASTM C739 (Sec. 9)
01/C02	16 CFR-Part 1209.5
Flammability	
01/F02	ASTM E84
01/F07	16 CFR-Part 1209.6
01/F08	16 CFR-Part 1209.7
01/F09	ASTM C739 (Sec. 10)
01/F10	ASTM C739 (Sec. 14)
Mass, Density, and Dimensional Stability	
01/D01	ASTM C136
01/D14	ASTM C520
01/D24	ASTM C739 (Sec. 12)
01/D26	16 CFR-Part 1209.4
01/D27	ASTM C739 (Sec. 8)
Related Material Properties	
01/V05	ASTM C739 (Sec. 11)
01/V06	ASTM C739 (Sec. 15)
Thermal Resistance	
01/T06	ASTM C518
01/T09	ASTM C653
01/T10	ASTM C687

NVLAP LAB CODE 100416-0

SGS U.S. Testing Company, Inc.

1341 North 108th East Avenue
Tulsa, OK 74116-5637
Contact: Mr. Dale E. Holloway
Phone: 918-437-8333
Fax: 918-437-8487

Commercial Products Testing

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Plumbing	
19/F01	ASME A112.18.1M (Sec. 5.2)
19/F02	ASME A112.18.1M (Sec. 5.14)
19/F03	ASME A112.18.1M (Sec. 6.2)
19/F04	ASME A112.18.1M (Sec. 6.4)
19/F05	ASME A112.18.1M (Sec. 6.5)
19/F06	ASME A112.18.1M (Sec. 6.6)
19/F07	ASME A112.18.1M (Sec. 6.7)
19/F08	ASME A112.18.1M (Sec. 6.8)
19/F09	ASME A112.18.1M (Sec. 5.13)
19/F10	ASME A112.18.1M (Sec. 6.3)
19/M01	ANSI/CABO A117.1 (Sec. 4.24)
19/M02	ASME/ANSI A112.19.7M (Sec. 5, 7)
19/M03	ASME/ANSI A112.19.8M (Sec. 4, 5)
19/M04	ASTM F446
19/M05	ASTM F462
19/P01	ANSI Z124.1 (Sec. 4, 5, 6)
19/P02	ANSI Z124.2 (Sec. 4, 5, 6)
19/P03	ANSI Z124.3 (Sec. 4, 5, 6)
19/P04	ANSI Z124.4 (Sec. 4, 5)
19/P05	ANSI Z124.4 (Sec. 8) per ASME A112.19.6M (Sec. 7.1)
19/P06	ANSI/IAPMO Z124.6 (Sec. 4, 5, 6)
19/P07	ANSI/IAPMO Z124.8 (Sec. 4, 5)
19/V01	ASME A112.19.2M (Sec. 7.1)
19/V02	ASME A112.19.2M (Sec. 7.2)
19/V03	ASME A112.19.2M (Sec. 7.3)
19/V04	ASME A112.19.2M (Sec. 7.4)
19/V05	ASME A112.19.2M (Sec. 7.5)
19/V06	ASME A112.19.2M (Sec. 7.7)
19/W01	ASME A112.19.6 (Sec. 7.1.2)
19/W02	ASME A112.19.6 (Sec. 7.1.3)
19/W03	ASME A112.19.6 (Sec. 7.1.4)
19/W04	ASME A112.19.6 (Sec. 7.1.5)
19/W05	ASME A112.19.6 (Sec. 7.1.6)
19/W06	ASME A112.19.6 (Sec. 7.1.7)
19/W07	ASME A112.19.6 (Sec. 7.1.8)
19/W08	ASME A112.19.6 (Sec. 7.1.9)

Thermal Insulation Materials

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Corrosiveness	
01/C01	ASTM C739 (Sec. 9)
01/C02	16 CFR-Part 1209.5

Flammability	
01/F08	16 CFR-Part 1209.7
01/F10	ASTM C739 (Sec. 14)
Mass, Density, and Dimensional Stability	
01/D02	ASTM C167
01/D18	ASTM D1622
01/D24	ASTM C739 (Sec. 12)
01/D26	16 CFR-Part 1209.4
01/D27	ASTM C739 (Sec. 8)
Related Material Properties	
01/V04	ASTM E96
01/V05	ASTM C739 (Sec. 11)
01/V06	ASTM C739 (Sec. 15)
Strength	
01/S02	ASTM C203

NVLAP LAB CODE 100417-0

Celotex Technical Center

10301 Ninth Street North
St. Petersburg, FL 33716-1514
Contact: Dr. Stanley R. Prince
Phone: 727-578-4359
Fax: 727-578-4280
E-Mail: sprince@celotex.com
URL: http://www.celotex.com

Acoustical Testing Services

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P04	ASTMC522
08/P06	ASTM E90 (ISO 140, Part 3)
08/P07	ASTM E492
08/P30	ASTM E1408
08/P34	ASTM E1414 (AMA-1-II-67)(ISO 140, Part 9)

Thermal Insulation Materials

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Flammability	
01/F02	ASTM E84
Mass, Density, and Dimensional Stability	
01/D03	ASTM C209 (Sec. 6)
01/D04	ASTM C209 (Sec. 13)
01/D05	ASTM C209 (S. 13) by D1037 (S. 100-106)
01/D06	ASTM C209 (S. 14) by D1037 (S. 107-110)
01/D07	ASTM C272
01/D18	ASTM D1622
01/D19	ASTM D2126
01/D23	ASTM D2842
Related Material Properties	
01/V04	ASTM E96
Strength	
01/S01a	ASTM C165 (Proc. A only)
01/S02	ASTM C203
01/S03	ASTM C209 (Sec. 9)
01/S04	ASTM C209 (Sec. 10)
01/S05	ASTM C209 (Sec. 11)
01/S06	ASTM C209 (Sec. 12)
01/S07	ASTM C273
01/S10	ASTM D828
01/S11	ASTM D1621 (Proc. A)
Thermal Resistance	
01/T04	ASTM C236
01/T06	ASTM C518

NVLAP LAB CODE 100418-0

Composite Panel Association (CPA)

18928 Premiere Court
Gaithersburg, MD 20879-1569
Contact: Mr. Gary Heroux
Phone: 301-670-0604
Fax: 301-840-1252
E-Mail: glheroux@aol.com

Wood Based Products

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
General Wood Products	
23/G02	ASTM D1037 (Part A, Sec. 11-20)
23/G03	ASTM D1037 (Part A, Sec. 28-33)
Particleboard and Medium-Density Fiberboard	
23/P02	ASTM D1037 (Part A, Sec. 61-67)
23/P03	ASTM D1037 (Part A, Sec. 68-73)
23/P05	ASTM D1037 (Part A, Sec. 100-106)
23/P06	ASTM D1037 (Part A, Sec. 107-110)
23/P08	ASTM D1037 (Part A, Sec. 126-127)
23/P09	ANSI/A208.1 (Sec. 3.4.4)
23/T01	ASTM E1333
23/T03	EN 120:92
23/T04	ASTM D5582
23/T05	ASTM D6007

NVLAP LAB CODE 100419-0

Test Site Services, Inc.

P.O. Box 766
Marlboro, MA 01752
Contact: Mr. Richard L. Wiedeman
Phone: 508-481-1684
Fax: 508-481-1684

URL: http://www.ultranet.com/ntss

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 100420-0

Timberco, Inc.- dba TECO
86305 College View Road
Eugene, OR 97405-9631
Contact: Mr. Darin Thompson
Phone: 541-746-8271
Fax: 541-747-1630
E-Mail: teco.tested.oregon@worldnet.att.net

Wood Based Products

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
General Wood Products	
23/G01	ASTM D906
23/G02	ASTM D1037 (Part A, Sec. 11-20)
23/G03	ASTM D1037 (Part A, Sec. 28-33)
23/G04	ASTM D2395 (Method A)
23/G05	ASTM D2718
23/G07	ASTM D3043 (Method C)
23/G08	ASTM D4442 (Method A)
23/G09	ASTM D4442 (Method B)
23/G10	ASTM E72
23/G11	ASTM E72 (Wet)
23/G12	ASTM E564
Hardwood Plywood	
23/H01	HP-1 (Sec. 4.3)
23/H02	HP-1 (Sec. 4.4)
23/H03	HP-1 (Sec. 4.6)
23/H04	ASTM E96
Particleboard and Medium-Density Fiberboard	
23/P01	ASTM D1037 (Part A, Sec. 21-27)
23/P02	ASTM D1037 (Part A, Sec. 61-67)
23/P03	ASTM D1037 (Part A, Sec. 68-73)
23/P05	ASTM D1037 (Part A, Sec. 100-106)
23/P06	ASTM D1037 (Part A, Sec. 107-110)
23/P07	ASTM D1037 (Part A, Sec. 118-124)
23/P08	ASTM D1037 (Part A, Sec. 126-127)
23/P09	ANSI/A208.1 (Sec. 3.4.4)
23/T01	ASTM E1333
23/T02	FTM 1-83
23/T04	ASTM D5582
Structural Composite Lumber, Glulam, I-Joists, Laminated Veneer Lumber	
23/J01	ASTM D143 (Sec. 47-54)
23/J02	ASTM D143 (Sec. 90-94)
23/J04	ASTM D198 (Sec. 4-11)
23/J06	ASTM D905
23/J07	ASTM D1037 (Part A, Sec. 87-90)
23/J08	ASTM D1101
23/J09	ASTM D1761 (Sec. 1-11)
23/J10	ASTM D2559 (Resistance to Shear)
23/J11	ASTM D2559 (Resistance to Delamination)
23/J12	ASTM D4688
23/J13	AITC 200 (T106)
23/J14	AITC 200 (T107)
23/J15	AITC 200 (T110)
23/J16	AITC 200 (T114)
23/J17	AITC 200 (T116)
23/J20	ASTM D3110
Structural Use Panels	
23/S04	ASTM E661
23/S05	PS-1 (Sec. 4.5.2)
23/S06	PS-1 (Sec. 4.5.3) (CAN/CSA-0325.1-88)
23/S07	PS-2 (Sec. 6.4.1) (CAN/CSA-0325.1-88)
23/S08	PS-2 (Sec. 6.4.2) (CAN/CSA-0325.1-88)
23/S09	PS-2 (Sec. 6.4.4) (CAN/CSA-0325.1-88)
23/S10	PS-2 (Sec. 6.4.7) (CAN/CSA-0325.1-88)
23/S11	PS-2 (Sec. 6.4.8) (CAN/CSA-0325.1-88)
23/S12	PS-2 (Sec. 6.4.9) (CAN/CSA-0325.1-88)
23/S13	PS-2 (Sec. 6.4.17) (CAN/CSA-0325.1-88)
23/S14	PS-2 (Sec. 6.4.18) (CAN/CSA-0325.1-88)
23/S15	PS-2 (Sec. 6.4.19) (Supplement No.1-92 to CAN/CSA-0325.1-88)
23/S16	PS-2 (Sec. 6.4.20) (Supplement No.1-92 to CAN/CSA-0325.1-88)

NVLAP LAB CODE 100421-0

PFS Corporation
2402 Daniels Street
Madison, WI 53718-6798
Contact: Mr. James P. VanSchoyck
Phone: 608-221-3361
Fax: 608-223-5560
E-Mail: pfsteco@pfs-teco.com
URL: http://www.pfs-teco.com

Wood Based Products

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
General Wood Products	
23/G01	ASTM D906
23/G02	ASTM D1037 (Part A, Sec. 11-20)
23/G03	ASTM D1037 (Part A, Sec. 28-33)
23/G04	ASTM D2395 (Method A)
23/G05	ASTM D2718
23/G06	ASTM D2719 (Method C)
23/G08	ASTM D4442 (Method A)
23/G09	ASTM D4442 (Method B)
23/G10	ASTM E72
23/G11	ASTM E72 (Wet)
23/G12	ASTM E564
23/G13	ASTM E695
23/G14	AFG-01-84 (Sec. 3.1)
23/G15	AFG-01-84 (Sec. 3.2)
23/G16	ASTM E489
23/G17	ASTM E767
23/G18	ASTM D1761 (Sec. 41-52)
Hardwood Plywood	
23/H01	HP-1 (Sec. 4.3)
23/H02	HP-1 (Sec. 4.4)
23/H03	HP-1 (Sec. 4.6)
23/H04	ASTM E96

Particleboard and Medium-Density Fiberboard

23/P01	ASTM D1037 (Part A, Sec. 21-27)
23/P02	ASTM D1037 (Part A, Sec. 61-67)
23/P03	ASTM D1037 (Part A, Sec. 68-73)
23/P04	ASTM D1037 (Part A, Sec. 81-86)
23/P05	ASTM D1037 (Part A, Sec. 100-106)
23/P06	ASTM D1037 (Part A, Sec. 107-110)
23/P07	ASTM D1037 (Part A, Sec. 118-124)
23/P08	ASTM D1037 (Part A, Sec. 126-127)
23/P09	ANSI/A208.1 (Sec. 3.4.4)
23/T01	ASTM E1333
23/T02	FTM 1-83
23/T04	ASTM D5582

Sandwich Constructions

23/X01	ASTM C273
23/X02	ATSM C297
23/X03	ASTM C365 (Method A)
23/X04	ASTM C393
23/X05	ASTM C480
23/X06	ASTM C481
23/X07	ASTM D1183

Structural Composite Lumber, Glulam, I-Joists, Laminated Veneer Lumber

23/J01	ASTM D143 (Sec. 47-54)
23/J02	ASTM D143 (Sec. 90-94)
23/J03	ASTM D143 (Sec. 100-104)
23/J04	ASTM D198 (Sec. 4-11)
23/J06	ASTM D905
23/J07	ASTM D1037 (Part A, Sec. 87-90)
23/J08	ASTM D1101
23/J09	ASTM D1761 (Sec. 1-11)
23/J10	ASTM D2559 (Resistance to Shear)
23/J11	ASTM D2559 (Resistance to Delamination)
23/J12	ASTM D4688
23/J13	AITC 200 (T106)
23/J14	AITC 200 (T107)
23/J15	AITC 200 (T110)
23/J16	AITC 200 (T114)
23/J17	AITC 200 (T116)
23/J20	ASTM D3110

Structural Use Panels

23/S01	ASTM D3044
23/S03	ASTM D3501 (Method B)
23/S04	ASTM E661
23/S05	PS-1 (Sec. 4.5.2)
23/S06	PS-1 (Sec. 4.5.3) (CAN/CSA-0325.1-88)
23/S07	PS-2 (Sec. 6.4.1) (CAN/CSA-0325.1-88)
23/S08	PS-2 (Sec. 6.4.2) (CAN/CSA-0325.1-88)
23/S09	PS-2 (Sec. 6.4.4) (CAN/CSA-0325.1-88)
23/S10	PS-2 (Sec. 6.4.7) (CAN/CSA-0325.1-88)
23/S11	PS-2 (Sec. 6.4.8) (CAN/CSA-0325.1-88)
23/S12	PS-2 (Sec. 6.4.9) (CAN/CSA-0325.1-88)
23/S13	PS-2 (Sec. 6.4.17) (CAN/CSA-0325.1-88)
23/S14	PS-2 (Sec. 6.4.18) (CAN/CSA-0325.1-88)
23/S15	PS-2 (Sec. 6.4.19) (Supplement No.1-92 to CAN/CSA-0325.1-88)
23/S16	PS-2 (Sec. 6.4.20) (Supplement No.1-92 to CAN/CSA-0325.1-88)

NVLAP LAB CODE 100422-0

PRIMES (Preflight Integration of Munitions & Electronic Systems)

46 TW/TSWW
401 W. Choctawhatchee Ave, Suite 265
Eglin Air Force Base, FL 32542-5724
Contact: Mr. Charles Steadman
Phone: 850-882-9354 x509
Fax: 850-882-9357
E-Mail: steadman@eglin.af.mil

MIL-STD-462 Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A01	MIL-STD-462 Method CE01
12/A04	MIL-STD-462 Method CE02
12/A06	MIL-STD-462 Method CE03
12/A08	MIL-STD-462 Method CE04
12/A10	MIL-STD-462 Method CE06
12/A12	MIL-STD-462 Method CE07
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B04	MIL-STD-462 Method CS03/CS04/CS05/CS08
12/B05	MIL-STD-462 Method CS06
12/B06	MIL-STD-462 Method CS07
12/B07	MIL-STD-462 Method CS09
12/B08	MIL-STD-462 Method CS10
12/B09	MIL-STD-462 Method CS11
12/B10	MIL-STD-462 Method CS12
12/B11	MIL-STD-462 Method CS13
Radiated Emissions:	
12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
12/D03	MIL-STD-462 Method RE03
Radiated Susceptibility:	
12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E03	MIL-STD-462 Method RS03 (Consult laboratory for field strengths available)
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)
12/E05	MIL-STD-462 Method RS05
12/E07	MIL-STD-462 Method RS06

NVLAP LAB CODE 100423-0

APA - The Engineered Wood Association Research Center

7011 South 19th Street
P.O. Box 11700
Tacoma, WA 98411-0700
Contact: Mr. Michael R. O'Halloran, Ph.D.
Phone: 253-565-6600
Fax: 253-565-7265
E-Mail: mike.ohalloran@apawood.org
URL: http://www.apawood.org

Wood Based Products

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
General Wood Products	
23/G05	ASTM D2718
23/G06	ASTM D2719 (Method C)
23/G07	ASTM D3043 (Method C)
23/G10	ASTM E72
23/G11	ASTM E72 (Wet)
Structural Composite Lumber, Glulam, I-Joists, Laminated Veneer Lumber	
23/J04	ASTM D198 (Sec. 4-11)
23/J05	ASTM D198 (Sec. 28-35)
23/J09	ASTM D1761 (Sec. 1-11)
23/J10	ASTM D2559 (Resistance to Shear)
23/J11	ASTM D2559 (Resistance to Delamination)
23/J12	ASTM D4688
Structural Use Panels	
23/S01	ASTM D3044
23/S02	ASTM D3500 (Method B)
23/S03	ASTM D3501 (Method B)
23/S04	ASTM E661
23/S07	PS-2 (Sec. 6.4.1) (CAN/CSA-0325.1-88)
23/S08	PS-2 (Sec. 6.4.2) (CAN/CSA-0325.1-88)
23/S09	PS-2 (Sec. 6.4.4) (CAN/CSA-0325.1-88)
23/S10	PS-2 (Sec. 6.4.7) (CAN/CSA-0325.1-88)
23/S11	PS-2 (Sec. 6.4.8) (CAN/CSA-0325.1-88)
23/S12	PS-2 (Sec. 6.4.9) (CAN/CSA-0325.1-88)
23/S13	PS-2 (Sec. 6.4.17) (CAN/CSA-0325.1-88)
23/S14	PS-2 (Sec. 6.4.18) (CAN/CSA-0325.1-88)
23/S15	PS-2 (Sec. 6.4.19) (Supplement No.1-92 to CAN/CSA-0325.1-88)
23/S16	PS-2 (Sec. 6.4.20) (Supplement No.1-92 to CAN/CSA-0325.1-88)

NVLAP LAB CODE 100424-0

Vibro-Acoustics Laboratory

727 Tapscott Road
Scarborough Ontario M1X 1A2
CANADA
Contact: Mr. Robert Gault
Phone: 416-291-7371
Fax: 416-291-8049
E-Mail: bqault@vibro-acoustics.com

Acoustical Testing Services

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
08/P36	ASTM E477

NVLAP LAB CODE 100425-0

Johns Manville Technical Center

10100 West Ute Avenue
P.O. Box 625005
Littleton, CO 80162-5005
Contact: Mr. Mark A. Albers
Phone: 303-978-5008
Fax: 303-978-3123
E-Mail: albersm@jm.com
URL: http://www.schuller.com/mtc/appliedtech.html

Acoustical Testing Services

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P04	ASTMC522
08/P06	ASTM E90 (ISO 140, Part 3)
08/P10	ANSI S12.31 (ISO 3741)
08/P13	ANSI S12.32 (ISO 3742)
08/P24	ANSI S12.10 (ISO 7779)
08/P33	ASTM E1111
08/P34	ASTM E1414 (AMA-1-II-67)(ISO 140, Part 9)
08/P35	ASTM E1050
08/P36	ASTM E477

Thermal Insulation Materials

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Flammability	
01/F01	TAPPI T461-OM
01/F02	ASTM E84
01/F05	ASTM E136
Mass, Density, and Dimensional Stability	
01/D02	ASTM C167
01/D03	ASTM C209 (Sec. 6)
01/D04	ASTM C209 (Sec. 13)
01/D05	ASTM C209 (S. 13) by D1037 (S. 100-106)
01/D08	ASTM C302
01/D09	ASTM C303
01/D11	ASTM C356
01/D12	ASTM C411
01/D13	ASTM C519

Related Material Properties

01/V04	ASTM E96
01/V07	ASTM C1104/C1104M

Strength

01/S01a	ASTM C165 (Proc. A only)
01/S02	ASTM C203
01/S03	ASTM C209 (Sec. 9)
01/S04	ASTM C209 (Sec. 10)
01/S05	ASTM C209 (Sec. 11)
01/S06	ASTM C209 (Sec. 12)
01/S08	ASTM C446
01/S10	ASTM D828

Thermal Resistance

01/T01	ASTM C177
01/T05	ASTM C335
01/T06	ASTM C518
01/T10	ASTM C687
01/T11	ASTM C976

NVLAP LAB CODE 100426-0

KTL Dallas, Inc.

802 N. Kealy
Lewisville, TX 75057-3136
Contact: Ms. Pat Wellborn
Phone: 972-436-9600
Fax: 972-436-2667
E-Mail: pwellborn@icomply.com
URL: http://www.icomply.com or http://www.ktl.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

AUSTEL Technical Standards as determined under the Telecommunications Act of 1991

NVLAP Code	*Designation*
12/T41	TS-001
12/T42	TS-002
12/T43	TS-003
12/T44	TS-004
12/T45	TS-006
12/T46	TS-008
12/T49	TS-016

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T50	AS/NZS 3260
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 100427-0

Michael & Associates

246 Woodland Drive
State College, PA 16803
Contact: Mr. Kevin Michael
Phone: 814-234-7042
Fax: 814-235-1381
E-Mail: Michael1@vicon.net
URL: http://www.michael1@vicon.net

Acoustical Testing Services

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
08/P26	ANSI S3.19 (ANSI S3.19-1974)
08/P27	ANSI S12.6

NVLAP LAB CODE 100428-0

Matsushita EMC Center

Yunitopia Sasayama, Yashiro
Sasayama-cho
Taki-gun, Hyogo 669-2356
JAPAN
Contact: Mr. Katsuo Ishihara
Phone: 81-795-52-5681
Fax: 81-795-52-5682
E-Mail: PAN02796@pas.mei.co.jp

FCC Test Methods

Accreditation Valid Through: December 31, 1999

Australian Standards referred to by clauses in AUSTEL Technical Standards

NVLAP Code	*Designation*
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100429-0

Queen Carpet Test Laboratory
2305 Lakeland Road, P.O. Box 1527
Dalton, GA 30722-1527
Contact: Mr. Brian Medlin
Phone: 706-277-1900
Fax: 706-277-5497

Carpet and Carpet Cushion
Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Tests Applicable to Carpet and Carpet Cushion	
03/T01	AATCC 16 (Option E)
03/T02	ASTM D2646 (Secs. 16-24)
03/T04	16 CFR Part 1630 (FF-1-70)
Tests Applicable to Carpets	
03/G04	AATCC 165
03/G05	ASTM D418 (Sec. 8)
03/G06	ASTM D418 (Sec. 9)
03/G07	ASTM D418 (Secs. 10-11)
03/G08	ASTM D418 (Sec. 13)
03/G09	ASTM D1335
03/G10	ASTM D3936
03/G12	ASTM E648

NVLAP LAB CODE 100430-0

Professional Service Industries, Inc., Pittsburgh Test. Lab. Div.
2710 West 5th Avenue
Eugene, OR 97402
Contact: Mr. Randy T. Webb
Phone: 541-484-9212
Fax: 541-344-2735
E-Mail: randy.webb@psi-inc.com

Wood Based Products
Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
General Wood Products	
23/G02	ASTM D1037 (Part A, Sec. 11-20)
23/G03	ASTM D1037 (Part A, Sec. 28-33)
23/G08	ASTM D4442 (Method A)
23/G10	ASTM E72
23/G11	ASTM E72 (Wet)
Hardwood Plywood	
23/H01	HP-1 (Sec. 4.3)
23/H02	HP-1 (Sec. 4.4)
23/H03	HP-1 (Sec. 4.6)
Particleboard and Medium-Density Fiberboard	
23/P04	ASTM D1037 (Part A, Sec. 81-86)
23/P05	ASTM D1037 (Part A, Sec. 100-106)
23/P06	ASTM D1037 (Part A, Sec. 107-110)
23/P07	ASTM D1037 (Part A, Sec. 118-124)
23/P08	ASTM D1037 (Part A, Sec. 126-127)
23/P09	ANSI/A208.1 (Sec. 3.4.4)
23/T01	ASTM E1333
23/T02	FTM 1-83
Structural Use Panels	
23/S04	ASTM E661
23/S05	PS-1 (Sec. 4.5.2)
23/S06	PS-1 (Sec. 4.5.3) (CAN/CSA-0325.1-88)
23/S07	PS-2 (Sec. 6.4.1) (CAN/CSA-0325.1-88)
23/S08	PS-2 (Sec. 6.4.2) (CAN/CSA-0325.1-88)
23/S09	PS-2 (Sec. 6.4.4) (CAN/CSA-0325.1-88)
23/S10	PS-2 (Sec. 6.4.7) (CAN/CSA-0325.1-88)
23/S11	PS-2 (Sec. 6.4.8) (CAN/CSA-0325.1-88)
23/S12	PS-2 (Sec. 6.4.9) (CAN/CSA-0325.1-88)
23/S13	PS-2 (Sec. 6.4.17) (CAN/CSA-0325.1-88)
23/S14	PS-2 (Sec. 6.4.18) (CAN/CSA-0325.1-88)
23/S15	PS-2 (Sec. 6.4.19) (Supplement No.1-92 to CAN/CSA-0325.1-88)
23/S16	PS-2 (Sec. 6.4.20) (Supplement No.1-92 to CAN/CSA-0325.1-88)

NVLAP LAB CODE 100431-0

PCTEST Engineering Laboratory, Inc.
6660-B Dobbin Road
Columbia, MD 21045-4708
Contact: Mr. Randy Ortanez
Phone: 410-290-6652
Fax: 410-290-6654
E-Mail: randy@pctestlab.com
URL: http://www.pctestlab.com

FCC Test Methods
Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 100432-0

InfoGard Laboratories, Inc.
641 Higuera Street, Second Floor
San Luis Obispo, CA 93401
Contact: Ms. Emily Culligan
Phone: 805-783-0810
Fax: 805-783-0889
E-Mail: eculligan@infogard.com
URL: http://www.infogard.com

Cryptographic Modules Testing

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
17/C01	NIST-CSTT:140-1; National Institute of Standards and Technology-Cryptographic Support Test Tool (CSTT) for the Federal Information Processing Standard 140-1 (FIPS 140-1) "Security Requirements for Cryptographic Modules."
17/C01a	Test Method Group 1: All test methods derived from FIPS 140-1 and specified in the CSTT, except those listed in Group 2 and Group 3.
17/C01b	Test Method Group 2: Test methods for Physical Security, Level 4 derived from FIPS 140-1 and specified in the CSTT
17/C01c	Test Method Group 3: Test methods for Software Security, Level 4 derived from FIPS 140-1 and specified in the CSTT

NVLAP LAB CODE 100501-0

Baltimore Gas & Electric Company

1650 Calvert Cliffs Parkway
Lusby, MD 20657-4702
Contact: Mr. Danny R. Adams
Phone: 410-495-2216
Fax: 410-495-2263

Ionizing Radiation Dosimetry

Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD802 in a Panasonic UD874A holder for ANSI-N13.11 categories I, II, IIIA, IV, VC, VI, VII, VIII.

NVLAP LAB CODE 100502-0

Union Electric Company, Callaway Plant

P.O. Box 620
Fulton, MO 65251-0620
Contact: Mr. Christopher C. Graham
Phone: 573-676-8380
Fax: 573-676-4476
E-Mail: ccgraham@cal.ameren.com

Ionizing Radiation Dosimetry

Accreditation Valid Through: March 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic Automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD-802-AS in a Panasonic UD-874A holder for ANSI HPS N13.11 categories I, II, IIIA, IV, VC, VI, VII, VIII.

NVLAP LAB CODE 100503-0

Mallinckrodt Group, Inc.

2703 Wagner Place
Maryland Heights, MO 63043
Contact: Mr. Roger Moroney
Phone: 314-654-7457
Fax: 314-654-7998
E-Mail: roger.moroney@mkg.com

Ionizing Radiation Dosimetry

Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing Harshaw automatic reader model 6600E.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Harshaw TLD model 8825 for ANSI-N13.11 catergories II, IIIB, IV, VC, VI, VII.

NVLAP LAB CODE 100504-0

Naval Dosimetry Center

National Naval Medical Center
Bethesda, MD 20889-5614
Contact: CAPT K. Mendenhall
Phone: 301-295-0142/5410
Fax: 301-295-5981
E-Mail: kmendenhall@navdoscen.med.navy.mil

Ionizing Radiation Dosimetry

Accreditation Valid Through: December 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing the Harshaw automatic reader models 8800 and 6600.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 and ANSI HPS N13.32-1995 through testing.

(See 'How To Use This Directory' on page 7.)

Harshaw 8801 (DT 648/PD)(Harshaw 4 Chip Card, 3 TLD700, 1 TLD600) in a Type 88 holder for ANSI-N13.11 categories I, II, IIIA, IIIB, IV, VA, VI, VII, VIII.

Harshaw extremity TLD XD-100 in a finger ring holder for ANSI HPS N13.32 (NIST Handbook 150-4, Table 2) categories I, II, IIIB, IV, VA.

NVLAP LAB CODE 100505-0

Duke Power Company Dosimetry Laboratory

526 South Church Street
P.O. Box 1006
Charlotte, NC 28201-1006
Contact: Mr. Donald N. Mei
Phone: 704-382-7547
Fax: 704-382-4477
E-Mail: dnmei@duke-energy.com

Ionizing Radiation Dosimetry

Accreditation Valid Through: March 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Harshaw Model 8800.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Harshaw TLD card Type 8801 in a model 8814 BGN holder for ANSI-N13.11 categories I, II, IIIA, IV, VB, VI, VII, VIII.

NVLAP LAB CODE 100506-0

Southern California Edison

San Onofre Nuclear Generating Station
5000 Pacific Coast Highway, P.O. Box 128
San Clemente, CA 92674-0128
Contact: Mr. James Rolph
Phone: 949-368-7050
Fax: 949-368-6049
E-Mail: rolphjt@songs.sce.com

Ionizing Radiation Dosimetry

Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS-N13.11-1993 through testing.

Panasonic TLD model UD802-AS2 in an ISA model 821 holder for ANSI-N13.11 categories I, II, IIIB, IV, VC, VI, VII.

NVLAP LAB CODE 100510-0

GPU Nuclear Corp.

Three Mile Island, Route 441 South
P.O. Box 480
Middletown, PA 17057-0480
Contact: Mr. J. W. Schmidt
Phone: 717-948-8744
Fax: 717-948-8549

Ionizing Radiation Dosimetry

Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing a Panasonic automatic reader model UD-710A.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD802-AS2 in an ISA model 830 hanger for ANSI-N13.11 categories I, II, IIIA, IV, VC, VI, VII.

Panasonic TLD model UD802-AS2N in an ISA model 830 hanger with Cd over elements 1 and 2, Pb filtration oven element 4 for ANSI-N13.11 category VIII.

NVLAP LAB CODE 100512-0

Radiation Detection Company

162 N. Wolfe Road
P.O. Box 3414
Sunnyvale, CA 94088-3414
Contact: Mr. Richard H. Holden
Phone: 408-735-8700
Fax: 408-735-0126
E-Mail: BaLaing@aol.com
URL: http://www.RadiationDetection.com

Ionizing Radiation Dosimetry

Accreditation Valid Through: December 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing (1) Teledyne 7300 and 310 reader; (2) Harshaw 3000A and 3500 reader; (3) Victoreen 2800 reader; (4) by manual film processing and reading on a Macbeth TD932 densitometer; (5) Tracketch; or (6) NE Autoscan 60 system and Ziess microscope.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

DESIGNATION	PROCESS	ANSI-N13.11 CATEGORIES
Hi Energy Photons TLD-100 powder (Type 06 & 09)	1*	II, IV
Lo Energy Photons TLD-100 powder & chips (Type 06 & 09)	1*	I, IIIA, VI
TLD Albedo (Type 22)	2 or 3,4	VIII
Film XBG (Type 01)	4	I, II, IIIA, IIIB, IV, VA, VI, VII
Neutron Tracketch CR-39 (Type 23)	5	VIII
Neutron Tracketch PN-3 (Type 23)	6	VIII
Beta/gamma Albedo TLD (Type 23)	2,3	II, IV, VA, VII
TLD-Beta/gamma-TLD 100 powder & chips (Type 30)	1,2 or 3	I, IIIA, IIIB, VA, VB, VI
TLD-Beta/gamma-TLD 100 powder & chips (Type 9)	1,2	VA, VII

* Processes listed above, 2 and 3, are considered functionally acceptable as substitutes which can be used in lieu of process 1 as listed above.

Extremity Finger Ring Type 05 Harshaw TLD-100 dosimeter for ANSI HPS N13.32-1995 and NIST Handbook 150-4, table 2 categories II, IVA, IVB, VA through testing.

NVLAP LAB CODE 100514-0

Ginna Nuclear Station

1503 Lake Road
Ontario, NY 14519-9742
Contact: Mr. William H. Thomson
Phone: 716-771-3323
Fax: 716-771-3905

Ionizing Radiation Dosimetry

Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS-N13.11-1993 through testing.

Panasonic TLD model UD802-AS in an ISA Model 821 hanger for ANSI-N13.11 categories I, II, IIIB, IV, VA, VI, VII.

Panasonic TLD model UD812A-5 in a Panasonic UD874A-T hanger for ANSI-N13.11 categories I, II, IV, V, VII.

Combination Panasonic TLD model UD812A-5 and UD809-AS in a Panasonic UD884A-T holder with cd shields for ANSI-N13.11 category VIII.

NVLAP LAB CODE 100515-0

Eberline Dosimetry Service

7021 Pan American Highway NE
Albuquerque, NM 87109
Contact: Mr. Ernest A. Sanchez
Phone: 505-345-3461
Fax: 505-761-5410
E-Mail: nutech@flash.net

Ionizing Radiation Dosimetry

Accreditation Valid Through: June 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing a Eberline manual reader TLR-6 and the Harshaw automatic readers model 8800 and 6600.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Eberline TLD-100 (2 or 3 TLD chips) for ANSI-N13.11 categories I, II, IIIA, IIIB, IV, VA, VI, VII, VIII.

Eberline Albedo TLD-100 for ANSI-N13.11 category VIII.

Eberline TLD-100 extremity dosimeter in an elastic ring holder for ANSI HPS N13.32 and NIST Handbook 150-4, table 2 categories I, II, IIIA, IV, VA.

Harshaw TLD-8814 for ANSI-N13.11 categories I, II, IIIA, IIIB, IV, VC, VI, VII.

Harshaw TLD-8806 for ANSI-N13.11 category VIII.

NVLAP LAB CODE 100516-0

Tennessee Valley Authority External Dosimetry Service

Sequoyah Access Road, P.O. Box 2000
Soddy-Daisy, TN 37379-2000
Contact: Mr. Mark A. Palmer
Phone: 423-843-8857
Fax: 423-843-7133
E-Mail: MAPALMER@TVA.GOV

Ionizing Radiation Dosimetry
Accreditation Valid Through: March 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD802-AS in a Panasonic UD874AT holder for ANSI HPS N13.11 categories I, II, IIIA, IV, VC, VI, VII, VIII.

NVLAP LAB CODE 100517-0

Carolina Power & Light Company, Harris Energy & Enviro. Center

3932 New Hill-Holleman Road
P.O. Box 327
New Hill, NC 27562-0327
Contact: Mr. A. G. Cheatham
Phone: 919-362-3215
Fax: 919-362-3354
E-Mail: gooch.cheatham@cplc.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the TLD radiation dosimeters listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS-N13.11-1993 and HPS ANSI-N13.32-1995 through testing.

Panasonic TLD model UD802 in a Panasonic closed type UD-874 ATM1 holder for ANSI-N13.11 categories I, II, IIIA, IV, VC, VI, VII, VIII.

Panasonic extremity TLD model UD-807 in a plastic ring holder for HPS ANSI-13.32 (NIST Handbook 150-4, table 2) category IVA.

Merlin Gerin DMC-100 Electronic Personal Dosimeter (EPD) with LDM-101 reader for ANSI N13.11 category IV.

Based on equivalency, the Panasonic TLD model UD802 in a wrist holder for HPS ANSI-13.32 (NIST Handbook 150-4, table 2) categories I, II, IIIA, IV, VC, VI, VII.

Based on equivalency, the DMC-100 Electronic Personal Dosimeter (EPD) in a wrist holder for HPS ANSI-13.32 (NIST Handbook 150-4, table 2) category IV.

NVLAP LAB CODE 100518-0

Landauer, Inc.

2 Science Road
Glenwood, IL 60425-1586
Contact: Dr. R. Craig Yoder
Phone: 708-755-7000
Fax: 708-755-7011
E-Mail: cyoder@landauerinc.com
URL: http://www.landauerinc.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: December 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing (1) Landauer (Kanars Data) automatic film reader; (2) Harshaw 2000 B/D Laser reader; (3) CR-39 manual optical readers; (4) manual densitometers X-Rite, Tech/Ops Model 301, Macbeth Model TD504, TD931, TD904; (5) ALNOR Dosacus reader; or (6) Landauer Custom Automated and Manual Delayed Optically Stimulated Luminescence (DOSL) Luxel reader and (7) Pulsed Optically Stimulated Luminescence (POSL).

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Landauer designation:

DOSIMETER	PROCESS	ANSI N13.11 CATEGORY	
		Based On Testing	Based On Tech. Equiv.
FILM			
G - Film "GARDRAY"(A)	1,4	I-VII	
R - G badge plus ER(G)	1,2,3,4	VIII	I-VII
R - G badge plus ALNOR ER(M)	1,3,4,5	VIII	I-VII
B - G badge plus CR 39(L)	1,3,4	VIII	I-VII

C - G badge plus CR-39 and Cadmium	1,3,4		I-VIII
J - G badge plus polycarbonate and Cadmium	1,3,4		I-VIII
Y - G badge plus Cadmium	1,3,4		I-VII
Q - DEX-RAY	1,3,4		I-VII
TLD			
K - ALNOR (TLD 100 chips)(K)(H)	5	I-VII	
W - modified - 2 chip Escort with x-ray filtration (J)	2	I, II	
Z - K badge (TLD 700 chips) plus Neutron Track Etch CR39(T)(I)	3,5	VIII	I-VII
F - L badge plus CR-39	1,3		I-VIII
F - L badge plus ER	1,2,3		I-VIII
L - 4 chip Alnor TLD	5		I-VII
M - K badge (TLD 700 chips)	5		I-VII
S - K badge (TLD 700 chips) plus ER	3,5		I-VIII
Z - K badge (TLD 700 chips) plus polycarbonate	3,5		I-VIII
DOSL			
H-Luxel type H	6	I-VII	VIII
POSL			
J-Luxel (003/POSL)	7	VIII	
P-Luxel (003/POSL)	7	I, II, IIIA, IV VC, VI, VII	

The following sites are included to perform limited volume, emergency response processing employing either a Harshaw 3000 manual reader or manual film processing techniques for the following badges:

DOSIMETER	ANSI N13.11 CATEGORY
G - Film "GARDRAY"	I through VII
L - TLD 4 chip "ALNOR"	I through VII
K - TLD 3 chip "ALNOR"	I through VII

Landauer, Inc. Company Offices: El Segundo, California; Houston, Texas; and East Brunswick, New Jersey.

This facility has been accredited to process the extremity dosimeters listed below, by virtue of actual demonstration of compliance with ANSI-N13.32-1995 and NIST Handbook 150-4, Pg. 14, Table 2, through employing the following readers/process: (1) Landauer Custom Automated, (2) Kanars Data Custom Automated (film), (3) Alnor Dosacus Automatic Reader, (4) Harshaw 2000B/D, 3000, 4000 manual, (5) Macbeth TD504, TD904, TD931 manual, and (6) Landauer Custom Luxel reader (7) Pulsed Optically Stimulated Luminescence (POSL).

DOSIMETER	PROCESS	ANSI N13.11 CATEGORY	
		Based On Testing	Based On Tech. Equiv.
TLD			
U - Ring (B) (Finger)	1,4	I, II, IIIA, IV, VA, VB, VD, VI, VII	
K - Modified K (H) (Wrist)	3,4	IIIA and VI	I, II, IV, VA, VB, VD, VII
FILM			
G - Gardray (A) (Wrist)	2,5	IIIA and VI	I, II, IV, VA, VB, VD, VII
DOSL			
H-Luxel type H (Wrist)	6	IIIA and VI	I, II, IV, VA, VB, VII
POSL			
P-Luxel (003/POSL)	7	IIIA and VI	I, II, IV, VA, VB, VII

NVLAP LAB CODE 100519-0

South Texas Project Dosimetry Laboratory

P.O. Box 289
Wadsworth, TX 77483
Contact: Mr. G. T. Powell
Phone: 512-972-7566
Fax: 512-972-7757
E-Mail: gtpowell@stpegs.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS-N13.11-1993 through testing.

Panasonic TLD Model UD802-AT in an ISA Model 830 holder for ANSI-N13.11 categories II, IV, VC, VI, VII.

Panasonic TLD Model UD802-AT in an ISA Model 810 holder for ANSI-N13.11 category VIII.

Panasonic TLD Model UD802/Neutron Pack in a Model ISA 830/ISA 810 holder for ANSI-N13.11 category VIII.

NVLAP LAB CODE 100521-0

Duquesne Light Company, Beaver Valley Power Station

Mail Drop BV-ERF
P.O. Box 4
Shippingport, PA 15077-0004
Contact: Mr. John T. Lebda
Phone: 412-393-5872
Fax: 412-393-5621
E-Mail: John_T_Lebda@dlc.dqe.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD812-AS2 for ANSI-N13.11 categories I, II, IIIA, IIIB, IV, VA, VB, VC, VI, VII.

The dosimeter is housed in a custom made plastic clam shell type holder with filtering of 4mg/cm² mylar over elements 1 & 2, 140 mg/cm² plastic over element 3, and 840 mg/cm² plastic over element 4.

Rados RAD-51R Electronic Dosimeter for ANSI N13.11 categories IIIB and IV.

NVLAP LAB CODE 100524-0

Duke Engineering and Services Environmental Laboratory

580 Main Street
Bolton, MA 01740-1398
Contact: Mr. Edward F. Maher, Sc.D
Phone: 978-568-2522
Fax: 978-568-2520
E-Mail: EHMaher@dukeengineering.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing a Panasonic automatic reader model 710A.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model 808 in a ISA model 830U holder for ANSI-N13.11 categories I, II, IIIA, IIIB, IV, VA, VB, VC, VI, VII.

Panasonic TLD model 814-AS4 for ANSI-N13.11 categories I, II, IIIA, IIIB, IV, VA, VB, VC, VI, VII.

Panasonic TLD models UD808/UD814 combined for category VIII.

NVLAP LAB CODE 100528-0

TU Electric-Comanche Peak Steam Electric Station

5 mi. NW Glen Rose off FM 56
P.O. Box 1002
Glen Rose, TX 76043
Contact: Mr. John R. Curtis
Phone: 254-897-5332
Fax: 254-897-0972
E-Mail: jcurtis@tuelectric.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: June 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD802-AT in an ISA 810 holder with Mylar-window for ANSI-N13.11 categories IIIB, IV, VB, VI, VII, VIII.

NVLAP LAB CODE 100529-0

Detroit Edison, Fermi 2 Dosimetry Laboratory
6400 North Dixie Highway, 100 AIB
Newport, MI 48166
Contact: Mr. Ronald Gillmore
Phone: 734-586-1388
Fax: 734-586-1041
E-Mail: gillmorer@dteenergy.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS-N13.11-1993 through testing.

Panasonic TLD model UD802-AS in an ISA-820 holder for ANSI-N13.11 categories I, II, IIIA, IV, VC, VI, VII, VIII.

NVLAP LAB CODE 100535-0

Entergy Operations, Inc.
Waterford 3, Hwy. 18, River Road
Taft, LA 70066
Contact: Mr. Ronald C. McLendon
Phone: 504-464-3199
Fax: 504-464-3151

Ionizing Radiation Dosimetry
Accreditation Valid Through: December 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD802-AS in a Panasonic 874A holder for ANSI-N13.11 categories I, II, IIIA, IV, VC, VI, VII, VIII.

NVLAP LAB CODE 100536-0

Arizona Public Service Co., Palo Verde Nuclear Generating Station
5801 S. Wintersburg Road, Station 6107
Tonopah, AZ 85354-7529
Contact: Mr. Michael W. Lantz
Phone: 602-393-5200
Fax: 602-393-5003
E-Mail: mlantz@apsc.com
URL: http://www.apsc.com/dosim.asp

Ionizing Radiation Dosimetry
Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD812-AS5 in an ISA holder with an open window over element 1 for ANSI-N13.11 categories I, II, IIIB, IV, VC, VI, VII.

Panasonic TLD combination UD809/UD812-AS in a Panasonic UD885A-T holder for ANSI-N13.11 category VIII.

Panasonic TLD model UD812-AS5 in a single use holder for ANSI-N13.11 categories I, II, IIIB, IV, VC, VI, VII.

Panasonic TLD model UD809AS/UD812 combination in a single use holder for ANSI-N13.11 categories VIII.

Merlin Gerlin DMC-100 Electronic Personnel Dosimeter for ANSI-N13.11 categories IIIB, IV, VI.

NVLAP LAB CODE 100537-0

Pacific Gas & Electric Company, Diablo Canyon Nuclear Power Plant
P.O. Box 56
Avila Beach, CA 93424
Contact: Mr. Mark O. Somerville
Phone: 805-545-4007
Fax: 805-545-6645
E-Mail: mos3@pge.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD802-AS in a Panasonic UD875AT holder for ANSI-N13.11 categories II, IIIA, IV, VA, VI, VII, VIII.

Combination Panasonic TLD model UD813-AS8 in a Panasonic UD885AT holder for ANSI-N13.11 category VIII.

NVLAP LAB CODE 100538-0

Con Edison, Indian Point

Broadway and Bleakley Avenue
Buchanan, NY 10511-1099
Contact: Mr. Richard J. Martucci
Phone: 914-271-7118
Fax: 914-734-5734
E-Mail: martuccir@coned.com

Ionizing Radiation Dosimetry

Accreditation Valid Through: June 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI-HPS N13.11-1993 through testing.

Panasonic TLD model UD802-AT in an 874 AT holder for ANSI-N13.11 categories I, II, IIIB, IV, VC, VI, VII, VIII.

NVLAP LAB CODE 100539-0

U.S. Army Radiation Standards & Dosimetry Laboratory

Attn: AMSAM-TMD-SR-D, Bldg. 5417
Redstone Arsenal, AL 35898-5000
Contact: Mr. Patrick Kuykendall
Phone: 256-876-3340
Fax: 256-955-6413
E-Mail: pkuyken@redstone.army.mil

Ionizing Radiation Dosimetry

Accreditation Valid Through: December 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic Model 710 reader.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic Model UD802AS in a Panasonic UD-874A-T holder for ANSI-N13.11 categories I, II, IIIA, IV, VA, VB, VC, VI, VII, VIII.

NVLAP LAB CODE 100540-0

Northeast Utilities Dosimetry Laboratory

3333 Berlin Turnpike
Newington, CT 06111
Contact: Mr. Charles R. Palmer
Phone: 860-447-1791
Fax: 860-444-5640
E-Mail: PALMECR@GWSMTP.NU.COM

Ionizing Radiation Dosimetry

Accreditation Valid Through: December 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Harshaw model 8800 TLD workstation.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Harshaw TLD card model 8801N (3 TLD 700, 1 TLD 600 chips) in a Harshaw Model 8810 holder for ANSI-N13.11 categories I, II, IIIB, IV, VB, VI, VII, and VIII.

NVLAP LAB CODE 100541-0

ComEd - TLD Processing Lab - CTEAM Facility

555 South Joliet Road
Bolingbrook, IL 60440
Contact: Mr. Frank Rescek
Phone: 630-663-3850
Fax: 630-663-3855
E-Mail: Frank Rescek@USCM.com

Ionizing Radiation Dosimetry

Accreditation Valid Through: December 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD802AS in a UD874-T hanger for ANSI-N13.11 categories I, II, IIIA, IV, VC, VI, VII, VIII.

NVLAP LAB CODE 100544-0

Florida Power & Light Company

700 Universe Blvd.
P.O. Box 14000
Juno Beach, FL 33408-0420
Contact: Mr. Joseph Danek
Phone: 561-694-4213
Fax: 561-694-3706
E-Mail: joe_danek@email.fpl.com

Ionizing Radiation Dosimetry

Accreditation Valid Through: June 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD716.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI-N13.11-1993 through testing.

Panasonic TLD model UD802-AT or AS in a ISA 820 holder for ANSI-N13.11 categories I, II, IIIB, IV, VC, VI, VII, VIII.

NVLAP LAB CODE 100548-0

US Air Force Center for Radiation Dosimetry

2402 E. Drive
Brooks AFB, TX 78235-5114
Contact: Dr. David N. Erwin
Phone: 210-536-2003
Fax: 210-536-2025
E-Mail: David.Erwin@Guardian.Brooks.AF.MIL
URL: http://www.brooks.af.mil/AL/OE/OEBD/oebd.htm

Ionizing Radiation Dosimetry

Accreditation Valid Through: March 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD716AGL.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD802AT in model 820-C hanger for ANSI-N13.11 categories I, II, IIIA, IV, VC, VI, VII, VIII.

Panasonic TLD model UD802AT in ISA model 822 neutron hanger for ANSI-N13.11 categories IV, VIII.

NVLAP LAB CODE 100551-0

Georgia Power Company/Enviro. Affairs, Enviro. Lab-Dosimetry

5131 Maner Road
Smyrna, GA 30080-7321
Contact: Mr. Michael C. Nichols
Phone: 404-799-2112
Fax: 404-799-2141
E-Mail: Michael.C.NICHOLS@GPC.COM

Ionizing Radiation Dosimetry

Accreditation Valid Through: March 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing Panasonic automatic readers model UD-710A and UD-717.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 and ANSI HPS N13.32 through testing.

Panasonic TLD model UD802-AS in a Panasonic 854A or UD-874ATM1 (closed) hanger for ANSI HPS N13.11 categories II, IIIB, IV, VC, VI, VII, VIII.

Panasonic extremity TLD model UD-817 in an elastic ring holder for ANSI HPS N13.32-1995 (NIST Handbook 150-4, table 2) categories II, IV and VII.

NVLAP LAB CODE 100554-0

PP&L, Inc.

Two North Ninth Street
Allentown, PA 18101-1179
Contact: Mr. Stephen L. Ingram
Phone: 610-774-5412
Fax: 610-774-7205
E-Mail: slingram@papl.com

Ionizing Radiation Dosimetry

Accreditation Valid Through: March 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD802-AS in a Panasonic UD874-AT1 or UD874-ATM1 hanger for ANSI-N13.11 categories I, II, IIIB, IV, VC, VI, VII, VIII.

NVLAP LAB CODE 100555-0

ICN Dosimetry Service, Div. of ICN Biomedicals, Inc.
3300 Hyland Ave., ICN Plaza
Costa Mesa, CA 92626
Contact: Ms. Sandra Nemecek
Phone: 714-545-0100 x2297
Fax: 714-668-3149
E-Mail: smnemecek@icnpharm.com
URL: http://www.dosimetry.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: June 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing the TLD automatic readers: Panasonic model UD710A, SLD STI model 8800, and Harshaw model 6600. In addition, the TLD manual readers: Panasonic model UD702 and Harshaw model 3500. The MacBeth TD932 densitometer, and a custom automatic developer and densitometer for film processing.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model ICN UD-802 with a model UD-854 or UD-874 hanger for ANSI-N13.11 categories I, II, IIIA, IV, VC, VI, VII, VIII.

ICN Film Badge (Kodak Type 4) for ANSI-N13.11 categories I, II, IIIA, IV, VA, VI, VII.

ICN Film Badge (Kodak Type 4 with CR39) for ANSI-N13.11 category VIII.

Panasonic TLD model UD-802 with CR39 in a model UD-874 hanger for ANSI-N13.11 category VIII.

ICN Remtrack (Harshaw) TLD model 100 enclosed in a laminated polyethylene material holder for ANSI N13.11 category II and IV.

HLD-100 for ANSI-N13.11 categories I, II, IIIA, IV, VA, VI, VII.

HLD-760 for ANSI-N13.11 categories I, II, IIIA, IV, VC, VI, VII, VIII.

HLD-760 plus CR39 for ANSI-N13.11 category VIII based on equivalence

This facility has been accredited to process the extremity dosimeters listed below by virtue of actual demonstration of compliance with ANSI-N13.32-1995 and NIST Handbook 150-4, Page 14, Table 2 categories.

Panasonic extremity TLD UD-807 in flex ring holder, based on testing for categories IVA, VA, and VB.

HLD-100 (Wrist), based on technical equivalence, for categories I, II IIIA, IIIB, IV, VA, VI, VII.

HLD-760 (Wrist), based on technical equivalence, for categories I, II, IIIA, IIIB, IV, VA, VI, VII.

HLD-100 (Ring), based on testing, for categories I, II, IIIA, IV, VA, VB, and VD.

HLD-100 1C (Ring), based on technical equivalence, for categories I, II, IIIA, IV, VA, VB, VD.

NVLAP LAB CODE 100556-0

Atomic Energy Industrial Laboratory of the Southwest, Inc.
9261 Kirby Drive
Houston, TX 77054-2514
Contact: Mr. Steven H. Allen
Phone: 713-790-9719
Fax: 713-790-0542
E-Mail: shallen@wt.net
URL: http://www.aeil.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing film processing using a computerized custom densitometer.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Film Badge B-4 (Kodak Type 2) for ANSI-N13.11 categories I, II, IIIA, IV, VC, VI, VII.

Film Badge N-5 (Kodak Type 2 and A) for ANSI-N13.11 category VIII.

(See 'How To Use This Directory' on page 7.)

NVLAP LAB CODE 100559-0

Troxler Radiation Monitoring Svc. a div. of Troxler Elect. Labs

3008 Cornwallis Road
P.O. Box 12057
Research Triangle Park, NC 27709
Contact: Mr. Stephen A. Browne
Phone: 919-549-8661
Fax: 919-549-0761
E-Mail: troxrso@troxlerlabs.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: June 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD802 with model UD854 hanger for ANSI-N13.11 category I, II, IIIA, IV, VC, VI, VII, VIIIA.

NVLAP LAB CODE 100560-0

Electric Boat Corp/A General Dynamics Co. Radiological Ctrl. Dept

75 Eastern Point Road
Groton, CT 06340-4909
Contact: Mr. Robert D. Renza
Phone: 860-433-3674
Fax: 860-433-0946
E-Mail: rrenza@ebmail.gdeb.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: March 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Harshaw manual reader model 4000.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

A Harshaw TLD model 4040, CaF2 Bulb Dosimeter for ANSI HPS N13.11 Category IV.

NVLAP LAB CODE 100561-0

Newport News Shipbuilding Radiological Control Department

4101 Washington Avenue
Newport News, VA 23607-2770
Contact: Mr. C. W. Amos
Phone: 757-380-2369
Fax: 757-380-3778

Ionizing Radiation Dosimetry
Accreditation Valid Through: March 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Harshaw automatic reader model 8800.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Harshaw TLD model 2276-L, BG (2 TLD 700, l TLD 600) in a Type 80 Harshaw cardholder for ANSI HPS N13.11 category IV.

NVLAP LAB CODE 100562-0

Radiation Laboratory, Taiwan Power Company

P.O. Box 7
Shihmen, Taipei 25302
TAIWAN
Contact: Mr. W. W. Yeh
Phone: +886-2-2638-1397
Fax: +886-2-2638-2446
E-Mail: u706667@taipower.com.tw

Ionizing Radiation Dosimetry
Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD802AS in a UD-874A holder for ANSI-N13.11 categories I, II, IIIA, IV, VA, VI, VII, VIII.

NVLAP LAB CODE 100563-0

Combustion Engineering, Inc.
2000 Day Hill Road, Dept. 9459-0202
P.O. Box 500
Windsor, CT 06095-0500
Contact: Mr. Stephen M. Sorensen
Phone: 860-285-5285
Fax: 860-285-2540

Ionizing Radiation Dosimetry
Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS-N13.11-1993 through testing.

Panasonic TLD model UD802-AS2 in a Panasonic UD874-AT holder for ANSI-N13.11 categories II, IV, VC, VII.

NVLAP LAB CODE 100565-0

Naval Nuclear Propulsion Program Directorate, Washington, D.C.
Puget Sound Naval Shipyard, Rad. Hlth
Division, Code 105.5, 1400 Farragut Ave
Bremerton, WA 98314-5000
Contact: Mr. R. K. Alspach
Phone: 360-476-3596
Fax: 360-476-4383

Ionizing Radiation Dosimetry
Accreditation Valid Through: March 31, 1999

The facility listed has been evaluated as a representative site and deemed competent to process the radiation dosimeter listed below through employing a Radiac Computer-Indicator Model No. CP-1112/PD TLD reader.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing:

CaF Bulb Dosimeter (DT-526/PD) for ANSI-N13.11 categories II, IV.

The accreditation is also extended to include processing performed by other facilities in the Naval Nuclear Propulsion Program which use identical equipment and procedures as listed above.

NVLAP LAB CODE 100567-0

HPNW
11535 S.W. 67th
Tigard, OR 97223-8504
Contact: Mr. Ross L. Mercer
Phone: 503-620-6617
Fax: 503-684-5548
E-Mail: Ross@HPNW.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: June 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic automatic reader model UD716 and the Harshaw 4400C for extremity processing.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI-HPS N13.11-1993 through testing.

Panasonic TLD model UD802-AT2 in a ISA 831U holder for ANSI-N13.11 categories I, II, IIIA, IV, VA, VI, VII and VIII.

This facility is accredited to process the Harshaw extremity TLD model 100 in a HPNW design ring holder for HPS ANSI-N13.32 (NIST Handbook 150-4, table 2) categories I, II, IIIA, IV, VC, VI, VII.

NVLAP LAB CODE 100570-0

Clinton Power Station
6 mi. East of Clinton, Route 54 East
P.O. Box 678
Clinton, IL 61727-0678
Contact: Ms. Mary J. Lewis
Phone: 217-935-8881 x3718
Fax: 217-935-4934
E-Mail: mary_lewis@illinova.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: December 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing a Panasonic Model UD716AGL automatic reader.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Panasonic TLD model UD-802-AT in a ISA model 820 holder for ANSI-N13.11 categories I, II, IIIA, IV, VC, VI, VII, VIII.

NVLAP LAB CODE 100571-0

United States Dosimetry Technology, Inc.

660-A George Washington Way
Richland, WA 99352-4246
Contact: Mr. M. K. Winegardner
Phone: 509-946-8738
Fax: 509-943-2710
E-Mail: mk_wine@compuserve.com
URL: http://www.usdt.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: December 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing a USDT TLD Card Reader and a USDT film densitometer.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

USDT TLD F (TLD-700 and 600) for ANSI-N13.11 categories I, II, IIIA, IV, VA, VI, VII, VIII.

USDT T-3 Kodak type 2 film for ANSI-13.11 categories I, II, IIIA, IV, VA, VI, VII.

NVLAP LAB CODE 100573-0

Proxtronics, Inc.

5795-B Burke Centre Parkway
P.O. Box 12150
Burke, VA 22015
Contact: Mr. W. Guy Davis
Phone: 703-425-4811
Fax: 703-503-2856
E-Mail: sales@Proxtronics.com
URL: http://www.proxtronics.com

Ionizing Radiation Dosimetry
Accreditation Valid Through: June 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing film processing using a Victoreen 07-440 densitometer and TLD processing using a Panasonic UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Film Badge (Kodak Type II) for ANSI N13.11 categories III & IV.

Panasonic TLD model UD802-AS2 in an ISA 831 hanger for ANSI N13.11 categories I, II, IIIA, IV, VC, VI, VII, VIII.

Panasonic TLD model UD802-AS2 in a Panasonic 854 hanger for ANSI N13.11 categories IIIA, IV.

NVLAP LAB CODE 101004-0

Labcorp Analytics Laboratory

8040 Villa Park Drive
Richmond, VA 23228
Contact: Mr. James A. Calpin
Phone: 804-264-7100
Fax: 804-264-8873

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101005-0

Severn Trent Laboratories (MA)

149 Rangeway Road
N. Billerica, MA 01862-2097
Contact: Dr. Ernest T. Dobi
Phone: 978-667-1400
Fax: 978-667-7871

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101006-0

Advanced Industrial Hygiene Services, Inc.

2131 S.W. 2 Ave.
Miami, FL 33129-1411
Contact: Mr. Bruce Marchette
Phone: 305-854-7554
Fax: 305-285-0677
E-Mail: AIHS1@AOL.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101011-0

Hygeia Laboratories, Inc.
600 West Cummings Park, Suite 1900
Woburn, MA 01801-6350
Contact: Ms. Diane E. Capen
Phone: 781-933-5074
Fax: 781-938-1487
E-Mail: Pichette64@atc-enviro.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101012-0

Dixon Information Inc.
78 West 2400 South
South Salt Lake, UT 84115-3013
Contact: Mr. Willard C. Dixon
Phone: 801-486-0800
Fax: 801-486-0849

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101014-0

Aires Consulting Group, Inc.
1550 Hubbard
Batavia, IL 60510
Contact: Ms. Cynthia Darling
Phone: 630-879-3006
Fax: 630-879-3014
E-Mail: cindydarling@airesconsulting.com
URL: airesconsulting.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101019-0

EA Group
7118 Industrial Park Blvd.
Mentor, OH 44060-5314
Contact: Mr. James D. Hale
Phone: 440-951-3514
Fax: 440-951-3774

URL: http://www.eagroup-ohio.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101031-0

Fiberquant, Inc.
5025 S. 33rd St.
Phoenix, AZ 85040
Contact: Mr. Larry S. Pierce
Phone: 602-276-6139
Fax: 602-276-4558
E-Mail: FIBERQUANT@ABILNET.COM
URL: http://www.fiberq.com/labs/fq.htm

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101032-0

Batta Laboratories, Inc.
Delaware Industrial Park
6 Garfield Way
Newark, DE 19713-5817
Contact: Mr. Naresh C. Batta
Phone: 302-737-3376
Fax: 302-737-5764
E-Mail: battaenv@battaenv.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101035-0

Microbac Laboratories, Inc.

Erie Testing Division
1962 Wager Road
Erie, PA 16509
Contact: Mr. Michael McElhinny
Phone: 814-825-8533
Fax: 814-825-9254

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101037-0

Microscopic Analysis, Inc.

11760 Westline Industrial Drive
St. Louis, MO 63146-3402
Contact: Mr. Douglas N. Nimmo
Phone: 314-993-2212
Fax: 314-993-3193

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101039-0

Carnow, Conibear & Associates Ltd.

333 W. Wacker Drive, Suite 1400
Chicago, IL 60606-1226
Contact: Mr. Aleksey Torosin
Phone: 312-782-4486
Fax: 312-782-5145

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101045-0

Hub Testing Laboratory, Inc.

95 Beaver Street
Waltham, MA 02453-8423
Contact: Mr. Frederick T. Boyle
Phone: 800-878-8938
Fax: 781-893-4414
E-Mail: ftboyle@ultranet.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101048-0

EMSL Analytical, Inc.

108 Haddon Avenue
Westmont, NJ 08108-2799
Contact: Mr. Robert G. Shumate, Jr.
Phone: 609-858-4800
Fax: 609-858-4960

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101048-1

EMSL Analytical, Inc.

1770 The Exchange SE, Suite 135
Atlanta, GA 30339
Contact: Rachel Travis
Phone: 770-956-9150
Fax: 770-956-9181

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101048-2

EMSL Analytical, Inc.
1056 Stelton Rd.
Piscataway, NJ 08854
Contact: Adrian Arav
Phone: 908-981-0550
Fax: 908-981-0551

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101048-3

EMSL Analytical, Inc.
1720 South Amphlett Blvd., Suite 130
San Mateo, CA 94402
Contact: Emmanuel Dounias
Phone: 650-570-5401
Fax: 650-570-5402

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101048-4

EMSL Analytical, Inc.
212 S. Wagner Road
Ann Arbor, MI 48103
Contact: Hildegard Hohnke
Phone: 734-668-6810
Fax: 734-668-8532

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101048-9

EMSL Analytical, Inc.
350 Fifth Avenue, 15th Floor, Suite 1524
New York, NY 10118
Contact: Jose Arriaga
Phone: 212-290-0051
Fax: 212-290-0058

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101048-10

EMSL Analytical, Inc.
208 Stone Henge Road
Carle Place, NY 11514
Contact: Brian Riedener
Phone: 516-997-7251
Fax: 516-997-7528

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101051-0

Accredited Environmental Technologies, Inc.
28 North Pennell Road
Media, PA 19063
Contact: Mr. Carl Josephson
Phone: 610-891-0114
Fax: 610-891-0559

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101058-0

Waste Management Federal Services of Hanford, Inc.
Waste Sampling & Characterization Fac.
P.O. Box 700 MSIN: S3-30
Richland, WA 99352
Contact: Ms. Maureen K. Hamilton
Phone: 509-373-7167
Fax: 509-373-7133
E-Mail: maureen k hamilton@rl.gov

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101060-0

DLZ Laboratories, Inc.
6121 Huntley Road
Columbus, OH 43229-1003
Contact: Mr. Michael R. Pannell
Phone: 614-848-4333
Fax: 614-841-0818
E-Mail: dlzlabs@iwaynet.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101061-0

ChemScope, Inc.
15 Moulthrop Street
North Haven, CT 06473-3686
Contact: Mr. Ronald D. Arena
Phone: 203-865-5605
Fax: 203-498-1610

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101062-0

A T Labs
250 DeBartolo Pl., Suite 2525
Youngstown, OH 44512
Contact: Mr. Edward B. Engel
Phone: 800-365-3396
Fax: 330-758-1245
E-Mail: edengel@ix.netcom.com
URL: http://assaytec.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101064-0

ECS/Wagner Environmental
371 West 5th Avenue
Eugene, OR 97401
Contact: Mr.Ms Les Lyons
Phone: 541-343-0300
Fax: 541-343-0375

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101066-0

Law Engineering and Environmental Services, Inc.
2100 Riverchase Center, Suite 450
Birmingham, AL 35244
Contact: Mr. James C. Findlay
Phone: 205-733-7672
Fax: 205-985-2951

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101070-0

PSI, Inc.
25 Dubon Court
Farmingdale, NY 11735
Contact: Dr. Antonio Lanzirotti
Phone: 516-752-1226
Fax: 516-752-1508
E-Mail: ALANZIR@IDT.NET

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101072-0

Bodycote Industrial Testing, Inc.
2350 South 7th Street
St. Louis, MO 63104-4296
Contact: Mr. William J. Lowry
Phone: 314-771-7111
Fax: 314-771-9573

Fasteners & Metals
Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*

Chemical Analysis

Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen
FA/547 ASTM E350
Energy dispersive X-ray analysis
FA/500 ASTM E1508
Optical emission spectrochemical analysis
FA/457 ASTM E415
Solution chemical analysis
FA/448 ASTM E350

Mechanical and Physical Testing and Inspection

Adhesion of metallic coatings on fasteners
FA/143 ASTM B571
FA/541 QQ-P-416 Sec. 4.6.2
Axial tensile strength of full-size threaded fasteners
FA/266 ASTM F606 Sec. 3.4.1-3.4.3
Bend test of full size eyebolts
FA/147 ASTM F541
Breaking strength of fullsize eyebolts
FA/275 ASTM A489
Brinell hardness of fasteners
FA/185 ASTM A370 Sec. 16
Charpy impact (u-notch) testing
FA/517 ASTM E23
Charpy impact (v-notch) testing
FA/211 ASTM A370 Sec. 19-28
FA/212 ASTM E23
Copper sulfate test - test for free iron on the surface of corrosion resistant fasteners
FA/545 ASTM A262 Sec. 22-31
Double shear of externally threaded fasteners
FA/257 MIL-STD-1312-13
Elevated temperature testing capability
FA/546 ASTM E21
Humidity testing of fasteners
FA/548 ASTM D2247
Hydrogen embrittlement (stress durability) of externally threaded fasteners
FA/549 Chrysler PS-9500
Intergranular corrosion susceptibility in austentic stainless steel fasteners - nitric aci
FA/173 ASTM A262 Sec. 15-21, Practice C
Intergranular corrosion susceptibility of austenitic stainles steel fasteners - oxalic acid
FA/174 ASTM A262 Sec. 3-7, Practice A
Magnetic permeability
FA/215 MIL-I-17214
Measurement of fastener coating thickness - magnetic methods
FA/153 ASTM B499
Measurement of fastener coating thickness - microscopical method
FA/160 ASTM B487
Measurement of fastener coating thickness - weight of coating
FA/164 ASTM A90
Microhardness of fasteners
FA/189 ASTM E384
Prevailing torque
FA/216 ANSI B18.16.1M
FA/217 IFI-100/107
Proof load of full-size externally threaded fasteners
FA/225 ASTM A370 Sec. A3.2.1.1-A3.2.1.3
FA/226 ASTM F606 Sec. 3.2.1-3.2.3
Proof load of full-size eyebolts
FA/231 ASTM A489
Proof load of internally threaded fasteners (nuts)
FA/237 ASTM F606M Sec. 4.2
Reusability test of self-locking internally threaded fasteners
FA/542 ANSI B18.16.1M
FA/543 IFI-100/107
Rockwell hardness of fasteners
FA/196 ASTM A370 Sec. 18
Rockwell superficial hardness of fasteners
FA/206 ASTM A370 Sec. 18
Salt spray testing of fasteners
FA/166 ASTM B117
Single shear of externally threaded fasteners
FA/256 MIL-STD-1312-20
Tension testing of machined specimens from externally threaded fasteners
FA/279 ASTM F606 Sec. 3.6
Torque-out test
FA/544 IFI-101
Total extension at fracture of externally threaded fasteners
FA/285 ASTM F606 Sec. 3.7
Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)
FA/507 ASTM E384
Wedge tensile strength of full-size threaded fasteners
FA/290 ASTM F606 Sec. 3.5
Yield strength of full-size externally threaded fasteners
FA/298 ASTM F606 Sec. 3.2.4

Metallography

Decarburization and case depth measurement in fasteners
FA/328 SAE J121
FA/330 SAE J423
Determination of grain size of fasteners
FA/331 ASTM E112
Macroscopic examination of fasteners by etching
FA/484 ASTM E381
Microscopic examination of fasteners by etching
FA/512 ASTM E407
Surface discontinuities of externally threaded fasteners
FA/361 SAE J123
Surface discontinuities of internally threaded fasteners
FA/365 SAE J122

Nondestructive Inspection

(See 'How To Use This Directory' on page 7.)

Liquid penetrant inspection of fasteners

FA/372	SAE J426

Magnetic particle inspection of fasteners

FA/378	SAE J420

NVLAP LAB CODE 101079-0

Wausau Insurance Companies

Environmental Health Laboratory
P.O. Box 8017, 2000 Westwood Drive
Wausau, WI 54402-8017
Contact: Dr. Thomas Stavros
Phone: 715-842-6810
Fax: 715-847-8391
E-Mail: tstavros@wausau.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101086-0

Analytica Solutions, Inc.

325 Interlocken Parkway, Suite 200
Broomfield, CO 80021
Contact: Mr. Tim Osbourn
Phone: 303-469-8868
Fax: 303-469-5254
E-Mail: Marketing@Analyticagroup.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101087-0

Environmental Monitoring & Consulting Associates

P.O. Box 872
Somerville, NJ 08876
Contact: Mr. Joel Russell
Phone: 732-249-3005
Fax: 732-249-3384

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101088-0

EEC, Inc.

107 Wind Chime Court
Raleigh, NC 27615
Contact: Mr. Mike Shrimanker
Phone: 919-846-1016
Fax: 919-846-1813

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101091-0

Maxim Technologies, Inc.

2342 Fabens
P.O. Box 59902
Dallas, TX 75229-3399
Contact: Ms. Joyce Eckles
Phone: 214-631-2700
Fax: 214-920-1891

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101091-1

Maxim Technologies, Inc.

222 Cavalcade Street
P.O. Box 8768
Houston, TX 77249-8768
Contact: Heidi Foltz
Phone: 713-692-9151
Fax: 713-696-6307

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101103-0

Chatfield Technical Consulting Limited

2071 Dickson Road
Mississauga Ontario L5B 1Y8
CANADA
Contact: Dr. Eric J. Chatfield
Phone: 905-896-7611
Fax: 905-896-1930
E-Mail: chatfiel@echo-on.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101106-0

Clayton Environmental Consultants

a division of Clayton Group Srvs., Inc.
4636 East Marginal Way South, Suite 215
Seattle, WA 98134-2331
Contact: Ms. Patricia Lukens
Phone: 206-763-7364
Fax: 206-763-4189

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101109-0

Wisconsin Occupational Health Laboratory

2601 Agriculture Drive
P.O. Box 7996
Madison, WI 53707-7996
Contact: Mr. Lyle Reichmann
Phone: 608-224-6221
Fax: 608-224-6213
E-Mail: LR@WOHL.SLH.WISC.EDU

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101111-0

City of Los Angeles Department of Water and Power

Department of Water and Power
PO Box 51111, 1630 N. Main St., Bldg. 7
Los Angeles, CA 90051-0100
Contact: Mr. Timothy B. Hemming
Phone: 213-367-7271
Fax: 213-367-7285

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101125-0

Clayton Laboratory Services

400 Chastain Center Blvd., NW
Suite 490
Kennesaw, GA 30144-5558
Contact: Mr. Alan M. Segrave
Phone: 770-499-7500
Fax: 770-423-4990
E-Mail: ASEG007@AOL.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101130-0

TEM, Incorporated

443 Duane Street
Glen Ellyn, IL 60137
Contact: Mr. James Tuinenga
Phone: 630-790-0880
Fax: 630-790-0882

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101135-0

McKee Environmental Health, Inc.

303 Westfield Lane
Friendswood, TX 77546-6316
Contact: Mr. Ronald S. McKee
Phone: 281-482-3403
Fax: 281-482-7203

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101136-0

American Medical Laboratories, Inc.

14225 Newbrook Drive
P.O. Box 10841
Chantilly, VA 20153-0841
Contact: Ms. Jan Turner
Phone: 703-802-6900
Fax: 703-802-7041

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101143-0

AMA Analytical Services, Inc.

4475 Forbes Blvd.
Lanham, MD 20706
Contact: Mr. Andreas Saldivar
Phone: 301-459-2640
Fax: 301-459-2643
E-Mail: AMALAB@EROLS.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101147-0

Hygienetics Laboratory Services

98 North Washington Street
Boston, MA 02114
Contact: Mr. Bryan Clark
Phone: 617-589-0660
Fax: 617-742-4285
E-Mail: lab@hygienetics.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101150-0

Schneider Laboratories, Inc.
2512 W. Cary Street
Richmond, VA 23220-5117
Contact: Mr. Raja F. Abouzaki
Phone: 804-353-6778
Fax: 804-353-6928
E-Mail: s_lab@ix.netcom.com
URL: http://www.slabinc.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101151-0

Micro Analytical Laboratories, Inc.
3618 N.W. 97th Blvd.
Gainesville, FL 32606
Contact: Mr. Robert A. Longo
Phone: 352-332-1701
Fax: 352-332-3572
E-Mail: MALINC@MSN.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101152-0

Law Engineering and Environmental Services, Inc.
5500 Guhn Road
Houston, TX 77040-6126
Contact: Mr. Tony T. Dang
Phone: 713-939-7161
Fax: 713-462-7903
E-Mail: tdang@lawco.com
URL: http://www.lawco.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101155-0

NATEC International, Inc.
7441 Anaconda Avenue
Garden Grove, CA 92841-2911
Contact: Mr. Vanc Thomas
Phone: 714-894-7577
Fax: 714-373-1768

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101162-0

EcoSystems Environmental, Inc.
1408A Vantage Street
Carrollton, TX 75006
Contact: Mr. Bakhtiar Dargali
Phone: 972-416-0520
Fax: 972-416-4512

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101165-0

International Asbestos Testing Laboratory
16000 Horizon Way, Unit 100
Mt. Laurel, NJ 08054
Contact: Mr. Frank E. Ehrenfeld, III
Phone: 609-231-9449
Fax: 609-231-9818

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101168-0

AAC Trinity, Inc.
38855 Hills Tech Drive, Suite 550
Farmington Hills, MI 48331
Contact: Mr. Charles A. O'Bryan
Phone: 248-848-9656
Fax: 248-848-9657
E-Mail: sales@aactrinity.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101170-0

Gelles Laboratories, Inc.
2836 Fisher Road
Columbus, OH 43204-3538
Contact: Dr. Stanley H. Gelles
Phone: 614-276-2957
Fax: 614-276-3441
E-Mail: infol@gellab.com or sgelles@compuserve.com
URL: http://www.gellab.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

(See 'How To Use This Directory' on page 7.)

NVLAP LAB CODE 101185-0

SEAS, Inc.
3089 Pandapas Pond Road
P.O. Box 660
Blacksburg, VA 24063-0660
Contact: Mr. David L. Violette
Phone: 540-951-9283
Fax: 540-951-9282
E-Mail: seas@swva.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101187-0

ATC Associates, Inc.
104 E. 25th Street 10th Floor
New York, NY 10010
Contact: Ms. Milena Lowd
Phone: 212-353-8280
Fax: 212-353-3599
E-Mail: Lowd15@ATC-ENVIRO.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101188-0

Tremco, Inc. - Roofing Division, An RPM Company
3735 Green Road
Beachwood, OH 44122
Contact: Mr. Greg Rudolph
Phone: 216-766-5644
Fax: 216-765-6737

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101190-0

Pacific Environmental Services, Inc.
560 Herndon Parkway, Suite 200
Herndon, VA 20170-5240
Contact: Ms. Pamela S. Reuille
Phone: 703-471-8383
Fax: 703-481-8296
E-Mail: preuille@hrn.pes.com
URL: http://www.pes.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101192-0

Philip Environmental Services Corp.
210 West Sandbank Road
P.O. Box 230
Columbia, IL 62236-0230
Contact: Mr. Craig M. Brooks
Phone: 618-281-7173
Fax: 618-281-5120
E-Mail: craig_brooks@philipinc.com
URL: http://www.philipinc.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101199-0

HYGENIX, INC.
40 Hoyt Street
Stamford, CT 06905-5616
Contact: Mr. Arthur Morris
Phone: 203-324-2222
Fax: 203-324-9857

URL: http://www.hygenix.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101202-0

STAT Analysis Corporation
2201 W. Campbell Park Dr.
Chicago, IL 60612-3501
Contact: Dr. Surendra N. Kumar
Phone: 312-733-0551
Fax: 312-733-2386

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101208-0

RJ Lee Group, Inc.
350 Hochberg Road
Monroeville, PA 15146-1516
Contact: Mr. Drew R. Van Orden
Phone: 724-325-1776
Fax: 724-733-1799
E-Mail: DREW@RJLG.COM
URL: http://www.RJLG.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101208-2

RJ Lee Group, Inc.
Bay Area Laboratory
530 McCormick Place
San Leandro, CA 94577
Contact: Kyle M. Bishop
Phone: 510-567-0480
Fax: 510-567-0488
E-Mail: KBISHOP@RJLG.COM
URL: http://www.RJLG.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101208-3

RJ Lee Group, Inc.
Manassas Laboratory
10503 Battleview Parkway
Manassas, VA 20109
Contact: Monica McCloy
Phone: 703-368-7880
Fax: 703-368-7761

URL: http://www.RJLG.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101208-5

RJ Lee Group, Inc.
Houston Laboratory
14760 Memorial Drive, Suite 106
Houston, TX 77079
Contact: Tony Rease
Phone: 281-584-0584
Fax: 281-584-0588
E-Mail: RJLG01@aol.com
URL: http://www.RJLG.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101216-0

CTL Environmental Services
24404 S. Vermont Avenue, Suite 307
Harbor City, CA 90710
Contact: Mr. Rich Brockbank
Phone: 310-530-5006
Fax: 310-530-0792
E-Mail: rbrockbank@ctles.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101218-0

EMS Laboratories, Inc.
117 West Bellevue Drive
Pasadena, CA 91105-2503
Contact: Ms. Bernadine M. Kolk
Phone: 626-568-4065
Fax: 626-796-5282
E-Mail: emslab2@aol.com
URL: http://www.emslabs.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101221-0

Micro Air, Inc.
6320 La Pas Trail
Indianapolis, IN 46268-4104
Contact: Dr. Morris L.V. French
Phone: 317-293-1533
Fax: 317-290-3566
E-Mail: microair@microair.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101222-0

Enviro-Probe, Inc.
2917 Bruckner Boulevard
Bronx, NY 10461
Contact: Dr. Ved P. Kukreja
Phone: 718-863-0045
Fax: 718-518-7454

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101226-0

Law Engineering and Environmental Services, Inc.

2801 Yorkmont Road
P.O. Box 11297
Charlotte, NC 28220
Contact: Mr. Jack Coan
Phone: 704-357-8600
Fax: 704-357-8639

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101228-0

The Scott Lawson Group, Ltd.

29 River Road
P.O. Box 3304
Concord, NH 03302-0894
Contact: Ms. Jennifer Scott
Phone: 603-228-3610
Fax: 603-228-3871

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101232-0

ERI Consulting Engineers, Inc.

2024 Republic Drive
P.O. Box 2024
Tyler, TX 75701-2024
Contact: Ms. Kathy R. Schosek
Phone: 903-534-5001
Fax: 903-534-8701

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101233-0

HIH Laboratory, Inc.

100 East NASA Road One, Suite 210
P.O. Box 57727
Webster, TX 77598
Contact: Mr. Jerry W. Bright
Phone: 281-338-9000
Fax: 281-338-2351

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101234-0

Braun Intertec Corporation

6875 Washington Avenue South
P.O. Box 39108
Minneapolis, MN 55439-0108
Contact: Ms. Beth Regan
Phone: 612-942-4828
Fax: 612-942-4844
E-Mail: bregan@brauncorp.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101235-0

Materials Analytical Services, Inc.

3945 Lakefield Court
Suwanee, GA 30024
Contact: Dr. William E. Longo
Phone: 770-448-3200
Fax: 770-368-8256
E-Mail: blongo@mastest.com
URL: http://www.mastest.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101237-0

State of Connecticut

Dept. of Public Health Laboratory
P.O. Box 1689
Hartford, CT 06144-1689
Contact: Ms. Janet B. Kapish
Phone: 860-509-8538
Fax: 860-509-8698

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101247-0

Micro Analytical, Inc.

11521 W. North Ave.
Milwaukee, WI 53226
Contact: Mr. Jon Yakish
Phone: 414-771-0855
Fax: 414-771-6570

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101249-0

Institute for Environmental Assessment
7101 Northland Circle
Brooklyn Park, MN 55428-1517
Contact: Ms. Yolanda Pope
Phone: 612-535-7721
Fax: 612-535-9177

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101254-0

Roy F. Weston, Inc.
1635 Pumphrey Avenue
Auburn, AL 36832-4303
Contact: Mr. Jamieson D. Webb
Phone: 334-826-6100
Fax: 334-826-8232

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101258-0

DCM Science Laboratory, Inc.
12421 W. 49th Ave., Unit 6
Wheat Ridge, CO 80033
Contact: Ms. Cindy Mefford
Phone: 303-463-8270
Fax: 303-463-8267
E-Mail: dcmscilab@aol.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101261-0

Asbestos Analysis and Information Service, Inc.
603 North Baker Street
P.O. Box 837
Four Oaks, NC 27524
Contact: Mr. Stephen H. Westbrook
Phone: 919-963-2898
Fax: 919-963-2841
E-Mail: STEHWEST@AOL.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101262-0

Philip Analytical Services
4418 Pottsville Pike
Reading, PA 19605
Contact: Mr. Fred Usbeck
Phone: 610-921-8833
Fax: 610-921-9667
E-Mail: FRED_USBECK@PHILIP-SERV.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101265-0

Pace Analytical
5156 E. 65th Street
Indianapolis, IN 46220-4871
Contact: Mr. Scott Patrick Lindsay
Phone: 317-845-7730 x1847
Fax: 317-845-0630

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101269-0

Volz Environmental Services, Inc.
1200 Gulf Lab Road
Pittsburgh, PA 15238-1304
Contact: Mr. George J. Skarupa
Phone: 412-826-8480
Fax: 412-826-8488

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101270-0

Pinchin Environmental Ltd.
5749 Coopers Ave.
Mississauga Ontario L4Z 1R9
CANADA
Contact: Ms. Wendy Bunner
Phone: 905-507-4850
Fax: 905-507-4884
E-Mail: kslayer@pinchin.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101277-0

EMSL Analytical, Inc.
Prosperity Plaza
3020 Hamaker Court, Suite B-110
Fairfax, VA 22301
Contact: Mr. Ronald Mahoney
Phone: 703-208-3200
Fax: 703-208-1822
E-Mail: mwatson@mantech.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101282-0

Mystic Air Quality Consultants, Inc.
1204 North Road
Groton, CT 06340
Contact: Mr. Christopher J. Eident
Phone: 203-449-8903
Fax: 203-449-8860
E-Mail: MAQC2@AOL.COM
URL: http://www.mysticair.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101288-0

University (State) Hygienic Laboratory
University of Iowa
102 Oakdale Campus, #H101 OH
Iowa City, IA 52242-5002
Contact: Dr. George Breuer
Phone: 319-335-4500
Fax: 319-335-4555
E-Mail: gbreuer@uhl.uiowa.edu
URL: http://www.uhl.uiowa.edu

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101292-0

Maxim Technologies, Inc.
600 South 25th Street
P.O. Box 30615
Billings, MT 59107
Contact: Ms. Kathleen A. Smit
Phone: 406-248-9161
Fax: 406-248-9282
E-Mail: maximT@wtp.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101295-0

ERT Testing Services
211 Glendale, Suite 425
Highland Park, MI 48203
Contact: Ms. Rose Grier
Phone: 313-865-0600
Fax: 313-865-8951

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101301-0

PMK Group, Inc.
629 Springfield Road
Kenilworth, NJ 07033
Contact: Mr. James Ferris
Phone: 908-686-0044
Fax: 908-686-0715
E-Mail: jimf@mars.superlink.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101306-0

Environmental Services International, Inc.
6404 MacCorkle Avenue, SW, Suite #2
St. Albans, WV 25177
Contact: Mr. Scott Rodeheaver
Phone: 304-768-2233
Fax: 304-768-9988
E-Mail: esilab@citynet.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101323-0

PA DEP Bureau of Laboratories
P.O. Box 1467
Harrisburg, PA 17105-1467
Contact: Mr. Floyd D. Kefford
Phone: 717-787-4669
Fax: 717-783-1502
E-Mail: Kefford.Floyd@al.DEP.state.PA.US

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101331-0

Kellco Services, Inc.
3137 Diablo Ave.
Hayward, CA 94545
Contact: Dr. Xiaomin (Simon) Wang
Phone: 510-786-9751
Fax: 510-786-9625
E-Mail: xwang@kellco.com
URL: http://www.kellco.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101332-0

New York Testing Laboratories, Inc.
100 Sweeneydale Avenue
Bay Shore, NY 11706
Contact: Mr. David Chen
Phone: 516-491-3800
Fax: 516-952-7441

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101342-0

PSI
4820 West 15th Street
Lawrence, KS 66049-3846
Contact: Mr. Wayne Dickerson
Phone: 785-865-9345
Fax: 785-865-9337
E-Mail: wdickers@idir.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101343-0

O'Brien & Gere Laboratories, Inc.
5000 Brittonfield Parkway
P.O. Box 4942
Syracuse, NY 13221
Contact: Mr. Michael J. Gerber
Phone: 315-437-0200
Fax: 315-463-7554

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101350-0

PSI
850 Poplar Street
Pittsburgh, PA 15220
Contact: Mr. Daniel Anderson
Phone: 412-922-4010 x260
Fax: 412-922-4014

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101356-0

Beling Consultants, Inc.
1001 16th Street
Moline, IL 61265
Contact: Mr. Jeffrey A. Wasson
Phone: 309-757-9814
Fax: 309-757-9812
E-Mail: jwasson@beling.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101375-0

Galson Laboratories
6601 Kirkville Road
P.O. Box 369
East Syracuse, NY 13057
Contact: Ms. Eva Galson
Phone: 315-432-5227
Fax: 315-437-0571

URL: http://www.galsonlabs.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101383-0

Lockheed Martin Utility Services, Inc.
Portsmouth Uranium Enrichment Plant
P.O. Box 628, 3930 US Route 23
Piketon, OH 45661
Contact: Ms. D. K. Perez
Phone: 740-897-5702
Fax: 740-897-3130

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101384-0

Health Science Associates
10771 Noel Street
Los Alamitos, CA 90720-2547
Contact: Ms. Jaime Steedman-Lyde
Phone: 714-220-3922
Fax: 714-220-2081
E-Mail: srosenberg@earthlink.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101399-0

Guardian Laboratories
6309 Fern Valley Pass
Louisville, KY 40228-1059
Contact: Dr. Dan C. Visanescu
Phone: 502-964-0865
Fax: 502-964-7681

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101410-0

Davis & Floyd, Inc.
816 East Durst Street
P.O. Drawer 428
Greenwood, SC 29649
Contact: Mr. E. Carl Burrell, Jr.
Phone: 864-229-4413
Fax: 864-229-7119
E-Mail: cburrell@davisfloyd.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101415-0

Larron Laboratory
529 Broadway
Cape Girardeau, MO 63701
Contact: Mr. Ronald E. Farrow
Phone: 573-334-8910
Fax: 573-334-8910

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101421-0

Hillmann Environmental Company
1600 Route 22 East
Union, NJ 07083-1597
Contact: Ms. Marianne Hillmann
Phone: 908-688-7800
Fax: 908-686-2636
E-Mail: hecopa@penn.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101424-0

TRC Environmental Corporation
5 Waterside Crossing
Windsor, CT 06095
Contact: Mr. Lance R. Cotton
Phone: 860-298-6326
Fax: 860-298-6399

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101425-0

Marine Chemist Service, Inc.
11850 Tug Boat Lane
Newport News, VA 23606
Contact: Ms. Colleen Becker
Phone: 757-873-0933
Fax: 757-873-1074
E-Mail: mchemserv@compuserve.com
URL: http://www.marinechemist.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101433-0

Dames & Moore, Inc.
5 Industrial Way
Salem, NH 03079
Contact: Mr. Douglas R. Lawson
Phone: 603-893-0616
Fax: 603-893-6240

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101440-0

RI Analytical Laboratories, Inc.
41 Illinois Avenue
Warwick, RI 02888-3007
Contact: Mr. Eric Neff
Phone: 401-737-8500
Fax: 401-738-1970

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101442-0

ASBESTECH
6825 Fair Oaks Blvd., Suite 103
Carmichael, CA 95608
Contact: Mr. Tommy Conlon
Phone: 916-481-8902
Fax: 916-481-3975

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101457-0

Assaigai Analytical Laboratories, Inc.
7300 Jefferson NE
P.O. Box 90430
Albuquerque, NM 87199-0430
Contact: Mr. William P. Biava
Phone: 505-822-8061
Fax: 505-822-8063
E-Mail: bjbiava@swcp.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101459-0

Forensic Analytical Specialties, Inc.
3777 Depot Road, Suite 409
Hayward, CA 94545-2756
Contact: Mr. David Sandusky
Phone: 510-887-8828
Fax: 510-887-4218
E-Mail: Daves@forensica.com
URL: http://www.forensica.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101459-1

Forensic Analytical Specialties, Inc.
2959 Pacific Commerce Drive
Rancho Domingues, CA 90221
Contact: Matilde Antillon
Phone: 310-763-2374
Fax: 310-763-8684

URL: http://www.forensica.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101463-0

Northern Testing Laboratories, Inc.
3330 Industrial Avenue
Fairbanks, AK 99701-7395
Contact: Ms. Cindy L. Christian
Phone: 907-456-3116
Fax: 907-456-3125
E-Mail: clcntl@polarnet.com
URL: http://www2.polarnet.com/~ntl

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101505-0

Los Angeles Unified School District
BSC Annex, Env. Health & Safety Branch
1449 So. San Pedro Street
Los Angeles, CA 90015
Contact: Mr. Brett Koontz
Phone: 213-743-5086
Fax: 213-749-8010
E-Mail: dbryant@lausd.k12.ca.us

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101506-0

Environmental Health Laboratories
St. Louis County Department of Health
111 So. Meramec
Clayton, MO 63105-1711
Contact: Dr. Robert A. Nicolotti
Phone: 314-854-6830
Fax: 314-854-6648
E-Mail: robert_nicolotti@co.st-louis.mo.us

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101510-0

Fibertec, Inc.
2280 Aurelius Road
Holt, MI 48842-2165
Contact: Mr. Phillip A. Peterson
Phone: 517-699-0345
Fax: 517-699-0388
E-Mail: asbestos@fibertec-USA.com
URL: http://www.asbestos@fibertec-usa.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101514-0

EnviroMed Services, Inc.
25 Science Park
New Haven, CT 06511
Contact: Mr. Joseph Pasquariello
Phone: 203-786-5580
Fax: 203-786-5579

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101515-0

Law Engineering and Environmental Services, Inc.
4919 West Laurel Street
Tampa, FL 33607
Contact: Mr. Monte Hall
Phone: 813-289-0750
Fax: 813-289-5474
E-Mail: mhall@lawco.com
URL: http://www.law-USA.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101515-1

Law Engineering and Environmental Services, Inc.
5845 N.W. 158th Street
Miami Lakes, FL 33014
Contact: Chris DuBour
Phone: 305-826-5588
Fax: 305-826-1799

URL: http://www.law-USA.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101523-0

DHMH-Air Quality Laboratory
201 West Preston Street
P.O. Box 2355
Baltimore, MD 21201-2355
Contact: Ms. Yvonne Tai-Sen-Choy
Phone: 410-767-5948
Fax: 410-333-5403

URL: http://www.charm.net/~epi6/labs.htm

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101530-0

Department of Environmental Health Industrial Hygiene Laboratory
9325 Hazard Way
San Diego, CA 92123-1217
Contact: Mr. Larry Marshall
Phone: 619-694-2232
Fax: 619-694-3434
E-Mail: LMARSHEH@CO.SAN-DIEGO.CA.US

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101539-0

Puget Sound Naval Shipyard
Code 134, Bldg. 371
1400 Farragut Ave.
Bremerton, WA 98314-5000
Contact: Mr. Michael Heaton
Phone: 360-476-8091
Fax: 360-476-5587

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101545-0

Nova Consulting Group, Inc.
1107 Hazeltine Boulevard, Suite 400
Chaska, MN 55318-1008
Contact: Mr. Steve Cummings
Phone: 612-448-9393
Fax: 612-448-9572
E-Mail: Novasbc@aol.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101558-0

Con Edison - ChemLab
31-01 20th Avenue, Bldg. 138
Long Island City, NY 11105-2048
Contact: Mr. Edward Chin
Phone: 718-204-4148
Fax: 718-956-8058

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101565-0

Northeast Test Consultants
587 Spring Street
P.O. Box 438
Westbrook, ME 04092
Contact: Ms. Laura Marles
Phone: 207-854-3939
Fax: 207-854-3658
E-Mail: INFO@NETEST.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101567-0

South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765-4182
Contact: Ms. Corazon B. Choa
Phone: 909-396-2172
Fax: 909-396-2175
E-Mail: cchoa@dbar7.aqmd.gov

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101572-0

South Carolina Department of Health & Environmental Control
Division of Air Quality Analysis
8231 Parklane Road
Columbia, SC 29223-4903
Contact: Mr. Scott A. Reynolds
Phone: 803-935-7020
Fax: 803-935-7363
E-Mail: reynolds@columb36.dhec.state.sc.us

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101578-0

AGX, Inc.
50 Progress Avenue
Cranberry Township, PA 16066
Contact: Mr. Daniel Winkle
Phone: 724-776-1905
Fax: 724-776-5714

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101580-0

Precision Testing Laboratories, Inc.
1909 S. Eastern
Moore, OK 73160-6060
Contact: Mr. C. Jack Harrel
Phone: 405-793-1468
Fax: 405-793-1489
E-Mail: ptl@mail.iamerica.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101587-0

Environmental Enterprise Group(EEG), Inc.
1305 East Main Street
Russellville, AR 72801
Contact: Mr. Keith Zimmerman
Phone: 501-968-6767
Fax: 501-968-1956
E-Mail: eeginc@cswnet.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101593-0

National Environmental Reference Laboratory
C/O US Geological Survey, MS PHL/NERL
P.O. Box 25046
Denver, CO 80225-0046
Contact: Mr. Bruce Hills
Phone: 303-236-3455 x500
Fax: 303-236-3440

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101594-0

TolTest, Inc.

1915 North 12th Street
P.O. Box 2186
Toledo, OH 43624-1305
Contact: Ms. Susan Pellitieri
Phone: 419-241-7175
Fax: 419-241-1808

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101595-0

Envirotest, Inc.

3902 Braxton
Houston, TX 77063-6304
Contact: Dr. Stuart C. Williams
Phone: 713-782-4411
Fax: 713-782-3428
E-Mail: scw@envirotestinc.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101611-0

Applied Environmental, Inc.

11800 Sunrise Valley Drive, Suite 1200
Reston, VA 20191
Contact: Ms. Jana H. Ambrose
Phone: 703-648-0822
Fax: 703-648-0575

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101618-0

Ambient Labs, Inc.

159 West 25th Street, 8th Floor
New York, NY 10001-7203
Contact: Mr. William Esposito, Jr.
Phone: 212-463-7812
Fax: 212-463-9397

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101631-0

Pacific Rim Environmental, Inc.

6510 Southcenter Boulevard
Tukwila, WA 98188
Contact: Mr. William F. Golloway
Phone: 206-244-8965
Fax: 206-244-9096

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101646-0

Eastern Analytical Services, Inc.

4 Westchester Plaza
Elmsford, NY 10523-1610
Contact: Mr. Paul Stascavage
Phone: 914-592-8380
Fax: 914-592-8956
E-Mail: PaulS@EASInc.com
URL: http://www.EASInc.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101649-0

Asbestos Consulting & Testing (ACT)

14953 West 101st Terrace
Lenexa, KS 66215
Contact: Mr. Jim A. Pickel
Phone: 913-492-1337
Fax: 913-492-1392

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101656-0

Precision Micro-Analysis, Inc.

3463 Ramona Avenue, Suite 16
Sacramento, CA 95826-3827
Contact: Mr. David G. Fisher
Phone: 916-456-4892
Fax: 916-456-1082
E-Mail: dreed@ns.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101661-0

Aurora Consolidated Laboratories
8901 W. Lincoln Avenue
West Allis, WI 53227
Contact: Dr. Leon Saryan
Phone: 414-328-7944
Fax: 414-328-8560

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101672-0

TC Analytics, Inc.
1200 Boissevain Ave.
Norfolk, VA 23507
Contact: Mr. Steven J.E. Long
Phone: 757-627-0400
Fax: 757-627-1118
E-Mail: tcgnorfolk@aol.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101703-0

U.S. EPA - National Enforcement Investigations Center
Box 25227 Bldg. 53, Denver Federal Ctr.
Denver, CO 80225
Contact: Ms. Peggy J. Forney
Phone: 303-236-5132 x267
Fax: 303-236-5116
E-Mail: forney.peggy@epamail.epa.gov

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101704-0

Allegheny Asbestos Analysis
416 Anthony Street
Carnegie, PA 15106
Contact: Ms. Tammy Seiler
Phone: 412-278-5400
Fax: 412-278-5404
E-Mail: TAMTAZ@SGI.NET

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101727-0

Analyticalab
8270 Archer Avenue
Willow Springs, IL 60480
Contact: Mr. Richard J. Langenderfer
Phone: 708-839-1338
Fax: 708-839-6970

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101732-0

United Analytical Services, Inc.
4413 West Roosevelt Road, Suite 108
Hillside, IL 60162-2057
Contact: Dr. Charles D. Byers
Phone: 708-449-0070
Fax: 708-449-9582
E-Mail: kevin4@flash.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101735-0

Jimmie Ann Bolton
2105 Nathan Drive
Austin, TX 78728-4530
Contact: Ms. Jimmie Ann Bolton
Phone: 512-251-8388
Fax: 512-459-8396

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101755-0

PSI
9 East 37th Street, 11th Floor
New York, NY 10016
Contact: Mr. Devaraj (VJ) Vijayakumar
Phone: 212-889-0294
Fax: 212-889-0493

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101759-0

Comprehensive Health Services-Environmental Health PLM Laboratory
Environmental Health PLM Laboratory
BOC-022
Kennedy Space Center, FL 32815
Contact: Dr. Ronald G. Cable
Phone: 407-867-9014
Fax: 407-867-3694
E-Mail: ronald.cable-1@kmail.ksc.nasa.gov

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101768-0

Carolina Environmental, Inc.
102-H Commonwealth Court
Cary, NC 27511
Contact: Mr. John D. Koenigs
Phone: 919-481-1413
Fax: 919-481-1442

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101771-0

Asbestos Analytical
2519 North Walnut Avenue
Tucson, AZ 85712-2414
Contact: Dr. John McLean
Phone: 520-323-7644
Fax: 520-323-7644

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101775-0

American Asbestos Laboratories, Inc.
99 SE 5th Street, 4th Floor
Miami, FL 33131-2545
Contact: Dr. Daniel J. Cottrell
Phone: 305-374-8300
Fax: 305-374-9004
E-Mail: eegmiami@mindspring.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101781-0

Covino Environmental Associates, Inc.
300 Wildwood Avenue
Woburn, MA 01801
Contact: Ms. Ann D. Eckmann
Phone: 781-933-2555
Fax: 781-932-9402
E-Mail: covino@tiac.net
URL: http://www.covino,com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101793-0

A & B Environmental Services, Inc.
1643 Federal Road
Houston, TX 77015
Contact: Mr. Robert L. Voorhies
Phone: 713-453-6060
Fax: 713-453-6091
E-Mail: aandblab@flash.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101803-0

CAMCO Lab
11040 Rose Avenue
Fontana, CA 92337-7051
Contact: Ms. Pamela Landreth
Phone: 909-428-3099
Fax: 909-428-3098

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101807-0

EnvironMETeo Services Inc.
94-515 Ukee Street, Suite 304
Waipahu, HI 96797
Contact: Mr. Clifford How
Phone: 808-671-8383
Fax: 808-671-7979
E-Mail: emet@aloha.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101832-0

A.R.C. Laboratories, Inc.
1323 9th Avenue South
Grand Forks, ND 58201
Contact: Mr. Joseph J. Worman
Phone: 701-772-6496
Fax: 701-772-6416

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101847-0

Law Engineering and Environmental Services, Inc.
22455 Davis Drive, Suite 100
Sterling, VA 20164
Contact: Mr. Ronald M. Combs
Phone: 703-404-7000
Fax: 703-404-7070

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101848-0

Environmental Testing, Inc.
100 South Cass Street
P.O. Box 138
Middletown, DE 19709-0138
Contact: Ms. Lee Ann Shinaberry
Phone: 302-378-4955
Fax: 302-378-9107
E-Mail: MAC.ECSI@DEL.NET

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101853-0

RCM Laboratories, Inc.
5400 East Avenue, Second Floor
Countryside, IL 60525
Contact: Dr. Tianbao Bai
Phone: 708-485-8600
Fax: 708-485-8607

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101855-0

Analytical Industries, Inc.
6025 Kentucky Dam Road
P.O. Box 3327
Paducah, KY 42003
Contact: Mr. Steve Stamper
Phone: 502-898-8683
Fax: 502-898-3531
E-Mail: aii@apex.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101864-0

Design for Health, Inc.
3475 Kettner Blvd.
San Diego, CA 92101
Contact: Mr. Kabir Shefa
Phone: 619-291-1777
Fax: 619-291-4318

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101868-0

AIResearch, Inc.
Environmental Consultants and Laboratory
2969 N. 114th Street
Wauwatosa, WI 53222
Contact: Ms. Jill Frey
Phone: 414-476-3131
Fax: 414-476-2201
E-Mail: airesrch@execpc.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101869-0

Northwest Envirocon, Inc.
101 East 8th Street, Suite 250
Vancouver, WA 98660
Contact: Mr. Naresh C. Singh, CQA
Phone: 360-699-4015
Fax: 360-699-5223
E-Mail: nareshsingh@nwenvirocon.com
URL: http://www.nwenvirocon.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101870-0

Sun City Analytical, Inc.
1409 Montana
El Paso, TX 79902
Contact: Ms. Priscilla Acuna
Phone: 915-533-8840
Fax: 915-533-8843
E-Mail: scai@flash.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101871-0

Apollo Environmental, Inc.
11553 U.S. Highway 41 South
P.O. Box 239
Gibsonton, FL 33534-9720
Contact: Mr. Michael L. Williamson
Phone: 813-671-3999
Fax: 813-677-3422

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101872-0

Micro Analytical Laboratories, Inc.
5900 Hollis Street, Suite M
Emeryville, CA 94608-2008
Contact: Mr. Frank Raviola
Phone: 510-653-0824
Fax: 510-653-1361
E-Mail: microlab@labmicro.com
URL: http://www.labmicro.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101882-0

Environmental Hazards Services, L.L.C.
7469 White Pine Road
Richmond, VA 23237
Contact: Ms. Irma Faszewski
Phone: 804-275-4788
Fax: 804-275-4907
E-Mail: managerqaqc@leadlab.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101884-0

Concord Analysis, Inc.
9960 Canoga Ave., Suite D8
Chatsworth, CA 91311-6704
Contact: Ms. Johanna Fann
Phone: 818-407-0128
Fax: 818-882-9409

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101886-0

Prezant Associates, Inc.
330 Sixth Avenue North, Suite 200
Seattle, WA 98109
Contact: Mr. George G. McCaslin
Phone: 206-281-8858 x135
Fax: 206-281-8922
E-Mail: jmccaslin@prezant.com
URL: http://www.prezant.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101890-0

Mountain Laboratories
10905 East Montgomery Avenue, Suite 2
Spokane, WA 99206
Contact: Mr. Wade K. Johnston
Phone: 406-728-7755
Fax: 406-728-7367
E-Mail: mcswade@ism.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101891-0

Asbestos TEM Laboratories, Inc.
1409 Fifth Street, Suite C
Berkeley, CA 94710
Contact: Mr. R. Mark Bailey
Phone: 510-528-0108
Fax: 510-528-0109
E-Mail: MBaileyASB@aol.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101894-0

Midwest Laboratories, Inc.

6246 Joliet Road, Suite 4
Countryside, IL 60525
Contact: Mr. James P. Hahn
Phone: 708-354-7117
Fax: 708-354-7142

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101895-0

McCall and Spero Environmental, Inc.

13005 Middletown Industrial Blvd.
Suite H
Louisville, KY 40223
Contact: Mr. R. Dale McCall
Phone: 502-244-7135
Fax: 502-244-7136

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101896-0

Reservoirs Environmental Services, Inc.

1827 Grant Street
Denver, CO 80203
Contact: Ms. Jeanne Spencer Orr
Phone: 303-830-1986
Fax: 303-863-9196
E-Mail: residen@rmi.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101896-1

Reservoirs Environmental Services, Inc.

1147 Brittmore Road, Suite 112
Houston, TX 77043
Contact: Brett S. Colbert
Phone: 713-932-0015
Fax: 713-984-0963

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101902-0

E. M. Analytical, Inc.

8000 North Ocean Drive
Dania, FL 33004-3078
Contact: Ms. Pat Blackwelder
Phone: 305-751-1184
Fax: 954-921-6747
E-Mail: pblackwelder@rsmas.miami.edu

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101904-0

Scientific Laboratories, Inc.

13635 Genito Road
Midlothian, VA 23112
Contact: Mr. Scot Cooke
Phone: 804-763-1200
Fax: 804-379-1087
E-Mail: SCILAB5@EROLS.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101904-1

Scientific Laboratories, Inc.

117 East 30th Street
New York, NY 10016
Contact: Dr. Robert E. Tompkins
Phone: 212-679-8600
Fax: 212-679-9392
E-Mail: SCILAB7@EROLS.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101909-0

Analytical Labs San Francisco, Inc.

470 Potrero Avenue
San Francisco, CA 94110
Contact: Ms. Olga Kist
Phone: 415-552-4595
Fax: 415-552-0730
E-Mail: alsf@wnet.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101910-0

PBS Environmental Building Consultants, Inc.
1220 SW Morrison Street, Suite 600
Portland, OR 97205-2225
Contact: Mr. Rollie Champe
Phone: 503-248-1939
Fax: 503-248-0223

URL: http://www.pbsenv.com/pbsinfo

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101917-0

DataChem Laboratories
4388 Glendale-Milford Road
Cincinnati, OH 45242-3706
Contact: Ms. Anna Marie Ristich
Phone: 513-733-5336
Fax: 513-733-5347
E-Mail: JCARTER702@AOL.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101920-0

Lab/Cor, Inc.
7619 6th Avenue, NW
Seattle, WA 98117-4037
Contact: Mr. John Harris
Phone: 206-781-0155
Fax: 206-789-8424
E-Mail: labcorl@aol.com

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101926-0

Environmental Management Consultants, Inc.
7342 East Thomas Road
Scottsdale, AZ 85251-7216
Contact: Mr. Kurt A. Kettler
Phone: 602-840-8012
Fax: 602-990-8468
E-Mail: kkettler@earthlink.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101937-0

Environmental Testing Laboratories, Inc.
208 Route 109
Farmingdale, NY 11735
Contact: Mr. Daniel J. Spandau
Phone: 516-249-1456
Fax: 516-249-8344

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101941-0

Kevco Services, Inc.
890 Pittsburgh Road
Butler, PA 16002-8901
Contact: Mr. George M. Beck
Phone: 724-586-6343
Fax: 724-586-2172

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101948-0

MACS Lab, Inc.
2070A Walsh Avenue
Santa Clara, CA 95050-2531
Contact: Mr. James A. Richards
Phone: 408-727-9727
Fax: 408-727-7065
E-Mail: jrichards@macslab.com
URL: http://www.macslab.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101950-0

WKP Laboratories, Inc.
46 South Highland Avenue
Ossining, NY 10562
Contact: Mr. Fabio J. Pedone
Phone: 914-941-1023
Fax: 914-941-7359

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101953-0

JLC Environmental Consultants, Inc.

200 Park Avenue South, Suite 1001
New York, NY 10003
Contact: Mr. Al Wallner
Phone: 212-420-8119
Fax: 212-420-6092

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101958-0

Athenica Environmental Services, Inc.

45-09 Greenpoint Avenue
Long Island City, NY 11104
Contact: Mr. Spiro Dongaris
Phone: 718-784-7490
Fax: 718-784-4085

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101959-0

QuanTEM Laboratories, LLC

2033 Heritage Park Drive
Oklahoma City, OK 73120-7579
Contact: Mr. John E. Barnett
Phone: 405-755-7272
Fax: 405-755-2058
E-Mail: quantem ionet.net
URL: http://www.quantem.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 101965-0

Bell Laboratories, Division Lucent Technologies, Inc.

P.O. Box 636, 600 Mountain Avenue
Murray Hill, NJ 07974-0636
Contact: Ms. Lisa Brooks
Phone: 908-582-7157
Fax: 908-582-7233
E-Mail: LB@lucent.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 101967-0

NY Environmental & Analytical Labs, Inc.

88 Harbor Road
Port Washington, NY 11050
Contact: Mr. Li Tsang
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Fax: 516-944-9507
E-Mail: ltsang@idt.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101970-0

PSI

500 West Central Avenue, Suite A
Brea, CA 92821
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Phone: 714-671-1072
Fax: 714-529-7229

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101973-0

Law Engineering and Environmental Services, Inc.

7616 LBJ Freeway, Suite 600
Dallas, TX 75251
Contact: Mr. John R. Cates
Phone: 972-934-0800
Fax: 972-934-1429
E-Mail: jcates@lawco.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101974-0

Rapid Environmental Management, Inc.

171 Great Neck Road
Great Neck, NY 11021
Contact: Mr. Joseph Sterinbach
Phone: 516-482-3003
Fax: 516-482-3076

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

(See 'How To Use This Directory' on page 7.)

NVLAP LAB CODE 101977-0

ACM Environmental, Inc.
229 South Michigan Street
South Bend, IN 46601
Contact: Mr. Michael A. Dials
Phone: 219-234-8435
Fax: 219-234-6800

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101990-0

Iowa Environmental Services, Inc.
4801 Grand Avenue
Des Moines, IA 50312
Contact: Mr. Richard E. Soyer
Phone: 515-279-8042
Fax: 515-279-1853

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 101996-0

GA Environmental Services, Inc.
401 Baldwin Tower
1510 Chester Pike
Eddystone, PA 19022
Contact: Ms. Delores S. Beard
Phone: 610-874-7405
Fax: 610-874-7823

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 101997-0

Hygieneering, Inc.
7575 Plaza Court
Willowbrook, IL 60521
Contact: Ms. Jacqueline M. Cadwallader
Phone: 630-654-2550
Fax: 630-789-3813

URL: http://www.hygieneering.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 102000-0

Louisiana Department of Environmental Quality Microanalytical Lab
Microanalytical Lab
8000 GSRI Avenue, Building #402
Baton Rouge, LA 70820
Contact: Ms. Pamela D. Ellis
Phone: 504-765-0876
Fax: 504-765-0048
E-Mail: pame@deq.state.la.us/

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102001-0

Testing Mechanics Corp.
3770 Merrick Road
Seaford, NY 11783-2815
Contact: Mr. Kevin Tumulty
Phone: 516-221-3800
Fax: 516-221-3810

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102003-0

GLE Associates, Inc.
1451 Channelside Drive, Suite 200
Tampa, FL 33605
Contact: Mr. James Watson
Phone: 813-241-8350
Fax: 813-241-8737

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102005-0

University of Alabama Asbestos Laboratory
Bryant Drive - Martha Parham West
P.O. Box 870388
Tuscaloosa, AL 35487-0388
Contact: Ms. Lynn M. Fondren
Phone: 205-348-8571
Fax: 205-348-9286
E-Mail: LFONDREN@CCS.UA.EDU

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 102006-0

Solar Environmental Services, Inc.
1131 E. 76th Avenue, Suite 102
Anchorage, AK 99518
Contact: Ms. Gracita O. Torrijos
Phone: 907-349-7705
Fax: 907-349-7944
E-Mail: sesenvir@ak.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102008-0

Micro Air of Texas, Inc.
1052 Hercules Drive
Houston, TX 77058
Contact: Mr. Eric Eitzen
Phone: 281-280-9965
Fax: 281-280-9847

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102010-0

Fluor Daniel Fernald, Inc., Analytical Laboratory Services
P.O. Box 538704
Cincinnati, OH 45253-8704
Contact: Ms. Amy Meyer
Phone: 513-648-5423
Fax: 513-648-5198

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102011-0

Airtek Environmental Corp.
39 West 38th Street, 12th Floor
New York, NY 10018
Contact: Mr. Saad Zouak
Phone: 212-768-0516
Fax: 212-768-0759

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102012-0

JMS Environmental Associates, Ltd.
816 Burr Oak Drive
Westmont, IL 60559
Contact: Mr. John Aschbacher
Phone: 630-655-8500
Fax: 630-655-8724
E-Mail: jms@starnetinc.com

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: March 31, 1999

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102013-0

Hi-Tech Environmental and Laboratory Services
DBA Hi-Tech Environmental & Lab. Srvs.
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Cypress, CA 90630
Contact: Ms. Gwenda Hatcher
Phone: 714-827-0693
Fax: 714-827-0695
E-Mail: Hitechol@ix.netcom.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 102015-0

ABM Environmental Consultants, Inc.
32-08 38th Ave., Suite 203
Long Island City, NY 11101
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Fax: 718-472-0548

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102020-0

Los Angeles Harbor Department Testing Laboratory
P.O. Box 786, 514 Pier A Street
Wilmington, CA 90744-6499
Contact: Mr. George Horeczko
Phone: 310-732-3976
Fax: 310-835-5717

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 102021-0

Safe Environment of America
dba Med-Tox Northwest
19032 66th Avenue S., #C-105
Kent, WA 98032
Contact: Mr. Scott Harper
Phone: 425-656-2920
Fax: 425-656-2924
E-Mail: medtownw@msn.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102025-0

OCCU-TEC, Inc.
6700 Corporate Drive, Suite 130
Kansas City, MO 64120
Contact: Mr. Geoffrey Smith
Phone: 816-231-5580
Fax: 816-231-5641
E-Mail: occutec@unicom.net
URL: http://www.occutec.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102029-0

ESG Laboratories
5933 W. 71st Street
Indianapolis, IN 46278
Contact: Ms. Mary Dunlap
Phone: 317-290-1471
Fax: 317-290-1670

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 102031-0

ATC Environmental, Inc.
6746 South Revere Parkway, Suite 180
Englewood, CO 80112-6708
Contact: Mr. Jeffrey Lomme
Phone: 303-799-6100
Fax: 301-799-3441

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102033-0

Analytical Environmental Services, Inc.
3781 Presidential Parkway, Suite 111
Atlanta, GA 30340
Contact: Mr. Mehmet Yildirim
Phone: 770-457-8177
Fax: 770-457-8188
E-Mail: EPHESUS@worldnet.att.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 102035-0

Law Engineering and Environmental Services, Inc.
4634 S. 36th Place
Phoenix, AZ 85040
Contact: Mr. Michael A. Cook
Phone: 602-437-0250
Fax: 602-437-3675

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102041-0

R. Robinson Analytical Services, Inc.
1960 Peyton Drive
Pensacola, FL 32503
Contact: Mr. William F. Robin Robinson
Phone: 850-438-5552
Fax: 850-432-7394
E-Mail: rrobinson@gulf.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102043-0

Water, Earth Solutions & Technologies, Inc.
17130 Dallas Parkway, Suite 120
Dallas, TX 75248-1139
Contact: Mr. Karl Schul
Phone: 972-380-9444
Fax: 972-380-9449

URL: http://www.water-earth.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102044-0

Loflin Environmental Services
2020 Montrose, Suite 100
Houston, TX 77006
Contact: Mr. James Murray
Phone: 713-521-3300
Fax: 713-523-0829

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102046-0

Criterion Laboratories, Inc.
3370 Progress Drive, Suite J
Bensalem, PA 19020
Contact: Ms. Parvaneh S. Sulon
Phone: 215-244-1300
Fax: 215-244-4349
E-Mail: CriterionL@aol.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102047-0

KAM Consultants
5-17 48th Avenue
Long Island City, NY 11101
Contact: Mr. George Kouvaras
Phone: 718-729-1997
Fax: 718-729-1876

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102050-0

Occupational Health Conservation, Inc.
1840 Southside Blvd., Suite 3C
Jacksonville, FL 32216-0317
Contact: Ms. A. Lynn Bundoc
Phone: 904-725-8279
Fax: 904-721-2809
E-Mail: lab@ohcnet.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102053-0

Dove Environmental Corporation
4715 NW 157th Street, Suite 203
Miami, FL 33014
Contact: Mr. Rajendranath Ramnath
Phone: 305-620-6050
Fax: 305-620-6350

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102056-0

Steve Moody Micro Services, Inc.
1510 Randolph St., Suite #602
Carrollton, TX 75006
Contact: Mr. Steve Moody
Phone: 972-446-9482
Fax: 972-446-9870
E-Mail: SMMS1@AIRMAIL.NET

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102057-0

Niche Analysis, Inc.
6 Gramatan Avenue, Suite 404
Mount Vernon, NY 10550
Contact: Dr. Thomas Palackal
Phone: 914-663-8937
Fax: 914-663-8782

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102060-0

Froehling & Robertson, Inc.
3015 Dumbarton Road
P.O. Box 27524
Richmond, VA 23261-7524
Contact: Mr. Jeffrey M. Hudson
Phone: 804-264-2701
Fax: 804-266-1275
E-Mail: AOL@FRCHemical

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102061-0

Omni Environmental, Inc.
13740 Research Blvd., Suite H-5
Austin, TX 78750
Contact: Mr. Joseph Mink
Phone: 512-258-9114
Fax: 512-258-9115
E-Mail: jmink@prismnet.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102062-0

National Econ Corporation
730 El Camino Real
Tustin, CA 92780
Contact: Mr. Mark S. Ervin
Phone: 714-730-9235
Fax: 714-730-9236
E-Mail: http://nationaleconcorp.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 102063-0

NVL Laboratories, Inc.
4708 Aurora Avenue N.
Seattle, WA 98103
Contact: Mr. Nghiep Vi Ly
Phone: 206-547-0100
Fax: 206-634-1936
E-Mail: munaf@nvllabs.com
URL: http://www.nvllabs.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 102064-0

GPU Nuclear Chemistry/Materials Labs.
Route 183 & Van Reed Road
P.O. Box 15152
Reading, PA 19612-5152
Contact: Mr. Barry Llewellyn
Phone: 610-375-5494
Fax: 610-375-5820
E-Mail: BLLEWELLYN@GPU.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 102065-0

Wonder Makers Environmental, Inc.
2117 Lane Boulevard
P.O. Box 50209
Kalamazoo, MI 49005-0209
Contact: Dr. Michael Pinto
Phone: 616-382-4154
Fax: 616-382-4161
E-Mail: info@wondermakers.com
URL: http://www.wondermakers.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 102071-0

ATC Associates Inc.
11121 Canal Road
Cincinnati, OH 45241
Contact: Mr. Karl D. Feldmann
Phone: 513-771-2112
Fax: 513-782-6920
E-Mail: feldman72@atc-enviro.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 102073-0

Triad Environmental Consulting, Inc.
309 3rd Avenue
Huntington, WV 25701
Contact: Mr. Brian E. Galligan
Phone: 304-523-2195
Fax: 304-523-2197
E-Mail: Duxster@earthlink.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102075-0

S&ME, Inc.
9751 Southern Pine Boulevard
P.O. Box 7668
Charlotte, NC 28241-7668
Contact: Mr. Charles J. Brockman
Phone: 704-523-4726
Fax: 704-525-3953

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

(See 'How To Use This Directory' on page 7.)

NVLAP LAB CODE 102077-0

Henderson/Longfellow Associates, Inc.

33 Fourth St. North
St. Petersburg, FL 33701
Contact: Mr. John J. Henderson
Phone: 727-550-0603
Fax: 727-550-9315

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 102078-0

FRS Geotech, Inc.

1441 West 46th Avenue, Suite 14
Denver, CO 80211-2338
Contact: Mr. Ed Raines
Phone: 303-477-2559
Fax: 303-477-2580
E-Mail: frsgeo@ix.netcom.com
URL: http://www.netcome.com/frsgeo/

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 102079-0

SCILAB BOSTON, Inc.

8 School Street
East Weymouth, MA 02189
Contact: Mr. John Sulkowski
Phone: 781-337-9334
Fax: 781-337-7642

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102080-0

National Analytical Laboratories, Inc.

503 Giuseppe Court #8
Roseville, CA 95678
Contact: Mr. Ron Weyand
Phone: 916-786-7555
Fax: 916-786-7459

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102081-0

Legend Technical Services, Inc.

775 Vandalia Street
St. Paul, MN 55114
Contact: Ms. Cheryl Sykora
Phone: 612-642-1150
Fax: 612-642-1239

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102082-0

Geo-Analytical Services, Inc.

3125 Marjan Drive
Atlanta, GA 30340
Contact: Dr. A. Mohamad Ghazi
Phone: 770-454-6333
Fax: 770-451-3151

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 102085-0

Muranaka Environmental Consultants, Inc.

500 Alakawa Street, Suite 220
P.O. Box 4341
Honolulu, HI 96812
Contact: Mr. Mark T. Muranaka
Phone: 808-848-8866
Fax: 808-847-5267
E-Mail: MMURANAKA@AOL.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 102086-0

Dolphin Environmental Consultants

10707 Corporate Drive, Suite 102
Stafford, TX 77477-4001
Contact: Mr. Joseph Bury
Phone: 281-240-4646
Fax: 281-240-5659
E-Mail: JBURY@COMPUSERVE.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102087-0

Hygeia Laboratories, Inc.
1300 Williams Drive, Suite A
Marietta, GA 30066-6299
Contact: Mr. Clayton Call
Phone: 770-514-6933
Fax: 770-514-6966

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102089-0

Alpine Consulting, Inc.
1602 South Murray Blvd.
Colorado Springs, CO 80916
Contact: Mr. Kevin R. Weaver
Phone: 719-591-2535
Fax: 719-591-2536

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102090-0

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
Contact: Ms. Cleofina David
Phone: 415-749-4629
Fax: 415-749-5101

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102091-0

Converse Consultants MR, Inc.
4840 Mill Street #5
Reno, NV 89502
Contact: Mr. Dan R. Dolk
Phone: 702-856-3833
Fax: 702-856-3513

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102093-0

EssTek Ohio, Inc.
6950 Engle Road #B
Middleburg Heights, OH 44130-3420
Contact: Mr. Clifford W. Thomas
Phone: 440-826-4220
Fax: 440-826-3841

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102101-0

Taylor Environmental Group, Inc.
130 Jericho Turnpike
Floral Park, NY 11001
Contact: Mr. George Taylor
Phone: 516-358-2955
Fax: 516-358-1780

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 102102-0

American Electric Power, Environmental Laboratory
Environmental Laboratory
1 Riverside Plaza
Columbus, OH 43215-2373
Contact: Mr. Geoffrey E. Campbell
Phone: 614-836-4210
Fax: 614-836-4168
E-Mail: Geoffrey_E._Campbell@AEP.COM

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102104-0

EMSL Analytical, Inc.
620-G Guilford College Road
Greensboro, NC 27409
Contact: Mr. Matthew Thomas
Phone: 336-297-1487
Fax: 336-297-1676

URL: http://www.emsl.com/

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102105-0

EMSL Analytical, Inc.
20 Altieri Way #4
Warwick, RI 02886
Contact: Mr. Donald Pellegrino
Phone: 401-738-7710
Fax: 401-738-7869

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102106-0

EMSL Analytical, Inc.
2501 Central Parkway, Suite C-13
Houston, TX 77092
Contact: Mr. Lee W. Poye
Phone: 713-686-3635
Fax: 713-686-3645

URL: http://www/emsl.com/

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102108-0

m.a.c. Paran Consulting Services, Inc.
Analytical Laboratory
325 West Ohio Pike, Suite 202
Amelia, OH 45102
Contact: Mr. Daniel T. Woody
Phone: 513-752-9111
Fax: 513-752-7973

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 102111-0

Cape Environmental Management, Inc.
2302 Parklake Drive, Suite 200
Atlanta, GA 30345-2907
Contact: Mr. Aleksey Reznik
Phone: 770-908-7200
Fax: 770-908-7219

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102112-0

Oklahoma Dept. of Environmental Quality-State Environmental Lab
1000 NE 10th Street
Oklahoma City, OK 73117-1212
Contact: Mr. Chris Armstrong
Phone: 405-271-5240
Fax: 405-271-1836
E-Mail: CHRIS.Armstrong@degmail.state.ok.us

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 102113-0

MRS., Analytical Laboratory, Inc.
233 W. Broadway, Suite #504
Louisville, KY 40202
Contact: Mr. Winterford Mensah
Phone: 502-568-2088
Fax: 502-491-7111

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102114-0

EAI, Inc.
454 Central Avenue
Jersey City, NJ 07307
Contact: Mr. Robert Carvalho
Phone: 201-714-9858
Fax: 201-714-9895

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102115-0

Industrial Laboratory
Norfolk Naval Shipyard
Building 184, 3rd Fl.
Portsmouth, VA 23709-5000
Contact: Mr. Robert West
Phone: 757-396-3207
Fax: 757-396-3972
E-Mail: rwest@nnsy_ns00.nnsy.navy.mil

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 102116-0

Hygeia Laboratories Inc.
82 W. Sierra Madre Blvd.
Sierra Madre, CA 91024-2434
Contact: Mr. Gustavo Delgado
Phone: 626-355-4711
Fax: 626-355-4497
E-Mail: gdelgado77@atc-enviro.com
URL: htpp://home.earthlink.net/delgadog

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 102118-0

Apex Research Laboratory
8741 Main Street, Suite A
Whitmore Lake, MI 48189
Contact: Mr. Robert Letarte
Phone: 734-449-9990
Fax: 734-449-9991

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200002-0

Cryptographic Equipment Assessment Lab. (CEAL)
a CygnaCom Solutions Lab.
7927 Jones Branch Drive, Suite 100 West
McLean, VA 22102-3305
Contact: Mr. Santosh Chokhani
Phone: 703-848-0883
Fax: 703-848-0960
E-Mail: chokhani@cygnacom.com
URL: http://cygnacom.com

Cryptographic Modules Testing
Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
17/C01	NIST-CSTT:140-1; National Institute of Standards and Technology-Cryptographic Support Test Tool (CSTT) for the Federal Information Processing Standard 140-1 (FIPS 140-1) "Security Requirements for Cryptographic Modules."
17/C01a	Test Method Group 1: All test methods derived from FIPS 140-1 and specified in the CSTT, except those listed in Group 2 and Group 3.
17/C01b	Test Method Group 2: Test methods for Physical Security, Level 4 derived from FIPS 140-1 and specified in the CSTT
17/C01c	Test Method Group 3: Test methods for Software Security, Level 4 derived from FIPS 140-1 and specified in the CSTT

NVLAP LAB CODE 200004-0

Integrity Design & Test Services, Inc.
37 Ayer Road, Unit #7
Littleton, MA 01460
Contact: Mr. Michael C. Boucher
Phone: 978-486-0432
Fax: 978-486-3538
E-Mail: mboucher@idts.com
URL: integrity@idts.com

FCC Test Methods
Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200005-0

Motorola Product Quality Assurance Laboratory
20 Cabot Boulevard
Mansfield, MA 02048
Contact: Mr. James E. Powers
Phone: 508-261-5241
Fax: 508-339-6738
E-Mail: LJP018@email.mot.com

FCC Test Methods
Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

(See 'How To Use This Directory' on page 7.)

NVLAP LAB CODE 200006-0

NJSP Calibration Laboratory

166 River Road
Princeton, NJ 08540-2939
Contact: SGT. John Connolly
Phone: 609-538-6059
Fax: 609-538-0345

Ionizing Radiation Dosimetry

Accreditation Valid Through: March 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing the Teledyne automatic reader model 9150.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 through testing.

Teledyne TLD model PB5 for ANSI-N13.11 categories II, IV.

NVLAP LAB CODE 200007-0

Lithonia Testing Laboratories

1335 Industrial Blvd.
P.O. Box A
Conyers, GA 30012-9001
Contact: Mr. James Hospodarsky
Phone: 770-922-9000 x2424
Fax: 770-929-8789

Energy Efficient Lighting Products

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Luminaires (Lighting Fixtures)	
22/F04	IES LM-41

NVLAP LAB CODE 200010-0

Tri-State Materials Testing Lab, Inc.

101A Liberty Street
Newington, CT 06111
Contact: Mr. John P. Chmielorz
Phone: 203-666-9954
Fax: 203-666-0195
E-Mail: mattestlab@aol.com
URL: http://www.materials-testing.com

Construction Materials Testing

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Aggregates	
02/A03	ASTM C29
02/A04	ASTM C40
02/A07	ASTM C117
02/A09	ASTM C127
02/A10	ASTM C128
02/A12	ASTM C136
02/A15	ASTM D75
02/A44	ASTM C566
Cement	
02/A17	ASTM C109
02/A22	ASTM C183
Concrete	
02/A01	ASTM C39
02/A02	ASTM C617
02/A41	ASTM C192
02/A43	ASTM C1064
02/G01	ASTM C31/C172/C143/C138/C231
Road and Paving Materials	
02/M08	ASTM D979
02/M24	ASTM D2041
02/M25	ASTM D2726
Soil and Rock	
02/L02	ASTM D422
02/L04	ASTM D698
02/L06	ASTM D1140
02/L08	ASTM D1557
02/L13	ASTM D2216
02/L20	ASTM D4318
Standard Practices	
02/A39	ASTM C1077

NVLAP LAB CODE 200012-0

IPS Corporation

4593, Hosohora Ono, Tatsuno-machi,
Kamiina-gun, Nagano-ken, P.O. Box 399-06
Nagano 399-06
JAPAN
Contact: Mr. Takashi Maruyama
Phone: +81-266-44-5200
Fax: +81-266-44-5300
E-Mail: maruyama@ips-emc.co.jp
URL: http://www.ips-emc.co.jp

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

(See 'How To Use This Directory' on page 7.)

NVLAP LAB CODE 200013-0

ENCORP

615 North Nash Street, Suite 203
El Segundo, CA 90245
Contact: Mr. Felix Mateo
Phone: 310-640-9811
Fax: 310-640-9804

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200014-0

Austin Analytical Laboratory

2401 Holly Street
P.O. Box 1088
Austin, TX 78767-8814
Contact: Mr. Larry K. Mutschler
Phone: 512-505-7842
Fax: 512-505-7843
E-Mail: mutschler@electric.austin.tx.us

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200016-0

Daybrite Lighting (Genlyte Thomas Group) Photometric Laboratory

1015 S. Green Street
P.O. Box 1687
Tupelo, MS 38802-1687
Contact: Dr. David W. Knoble, P.E.
Phone: 601-842-7212
Fax: 601-841-5596

Energy Efficient Lighting Products

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Luminaires (Lighting Fixtures)	
22/F01	IES LM-10
22/F03	IES LM-35
22/F04	IES LM-41
22/F05	IES LM-46

NVLAP LAB CODE 200017-0

DOMUS ITSL, a division of LGS Group, Incorporated

309 Cooper Street, 5th Floor
Ottawa Ontario K2P 0G5
CANADA
Contact: Mr. Robert Macdonald
Phone: 613-230-6285 x339
Fax: 613-230-3274
E-Mail: bob_macdonald@lgs.ca
URL: http://www.domus.com

Cryptographic Modules Testing

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
17/C01	NIST-CSTT:140-1; National Institute of Standards and Technology-Cryptographic Support Test Tool (CSTT) for the Federal Information Processing Standard 140-1 (FIPS 140-1) "Security Requirements for Cryptographic Modules."
17/C01a	Test Method Group 1: All test methods derived from FIPS 140-1 and specified in the CSTT, except those listed in Group 2 and Group 3.
17/C01b	Test Method Group 2: Test methods for Physical Security, Level 4 derived from FIPS 140-1 and specified in the CSTT
17/C01c	Test Method Group 3: Test methods for Software Security, Level 4 derived from FIPS 140-1 and specified in the CSTT

NVLAP LAB CODE 200018-0

Test-Con Incorporated

80 Sand Pit Road
P.O. Box 3116
Danbury, CT 06813-3116
Contact: Mr. Chin Okwuka
Phone: 203-748-3012
Fax: 203-778-0633
E-Mail: TestConInc@aol.com

Construction Materials Testing

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Aggregates	
02/A03	ASTM C29
02/A04	ASTM C40
02/A07	ASTM C117
02/A09	ASTM C127
02/A10	ASTM C128
02/A12	ASTM C136
02/A15	ASTM D75
Cement	
02/A52	ASTM C1019
Concrete	
02/A01	ASTM C39

02/A02	ASTM C617
02/A41	ASTM C192
02/A43	ASTM C1064
02/A45	ASTM C42
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173

Soil and Rock

02/L02	ASTM D422
02/L04	ASTM D698
02/L06	ASTM D1140
02/L07	ASTM D1556
02/L08	ASTM D1557
02/L16	ASTM D2487
02/L17	ASTM D2488
02/L20	ASTM D4318
02/L23	ASTM D2922
02/L24	ASTM D2974
02/L31	ASTM D2167

Standard Practices

02/A38	ASTM E329
02/A39	ASTM C1077

NVLAP LAB CODE 200019-0

EMSL Analytical, Inc.
1001 SW Klickitat Way, Suite 107
Seattle, WA 98134
Contact: Ms. Carol Evans
Phone: 206-233-9007
Fax: 206-233-9011

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: March 31, 1999

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 200020-0

Hubbell Lighting Photometric Laboratory
2000 Electric Way
Christiansburg, VA 24073-2502
Contact: Mr. Robert C. Speck
Phone: 540-382-6111 x239
Fax: 540-382-1544
E-Mail: rcspeck@hubbell-ltg.com
URL: www.hubbell-ltg.com/default.htm/photlab.html

Energy Efficient Lighting Products
Accreditation Valid Through: December 31, 1999

Luminaires (Lighting Fixtures)

NVLAP Code	*Designation*
22/F01	IES LM-10
22/F02	IES LM-31
22/F03	IES LM-35
22/F04	IES LM-41
22/F05	IES LM-46

NVLAP LAB CODE 200021-0

Wayne Langston, Inc.
P.O. Box 1377
League City, TX 77574-1377
Contact: Mr. Wayne Langston
Phone: 281-337-6785
Fax: 281-337-7217
E-Mail: langstoninc@msn.com

FCC Test Methods
Accreditation Valid Through: September 30, 1999

Australian Standards referred to by clauses in AUSTEL Technical Standards

NVLAP Code	*Designation*
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200024-0

Enviro Techniques, Inc.
22 California Avenue
Paterson, NJ 07503
Contact: Mr. Frank Marino
Phone: 973-684-0202
Fax: 973-684-3007

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 200025-0

CHEMTEX Environmental Laboratory, Inc.
3082 25th Street
P.O. Box 3922
Port Arthur, TX 77642
Contact: Dr. C. N. Reddy
Phone: 409-983-4575
Fax: 409-983-2126

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 200027-0

Vartest Laboratories, Inc.

19 West 36th Street, 10th Floor
New York, NY 10018-7909
Contact: Mr. Adam R. Varley
Phone: 212-947-8391
Fax: 212-947-8719
E-Mail: avarley@vartest.com
URL: http://www.vartest.com

Carpet and Carpet Cushion

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Tests Applicable to Carpet and Carpet Cushion	
03/T01	AATCC 16 (Option E)
03/T02	ASTM D2646 (Secs. 16-24)
03/T04	16 CFR Part 1630 (FF-1-70)
Tests Applicable to Carpets	
03/G01	AATCC 20
03/G02	AATCC 20A
03/G04	AATCC 165

NVLAP LAB CODE 200030-0

Dodge-Regupol, Inc. Laboratory

715 Fountain Avenue
P.O. Box 989
Lancaster, PA 17608-0989
Contact: Mr. Clyde T. Diffendall
Phone: 717-295-3400 x262
Fax: 717-295-3414

Commercial Products Testing

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Plastics	
15/A23	ASTM D412 (Para. 17.2.2, 17.6)
15/A24	ASTM D573
15/A25	ASTM D624
15/A26	ASTM D2240
15/A30	ASTM D297 (Sec. 16; Para. 16.3)

NVLAP LAB CODE 200031-0

Intertek Testing Services NA Inc.

8431 Murphy Drive
Middleton, WI 53562
Contact: Mr. Nigel Stamp
Phone: 608-836-4400
Fax: 608-831-9279
E-Mail: nstamp@itsqs.com
URL: http://www.worldlab.com

Thermal Insulation Materials

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Thermal Resistance	
01/T04	ASTM C236

NVLAP LAB CODE 200032-0

ITEK Enviro Services, Inc.

901 Grandview Drive
South San Francisco, CA 94080-4931
Contact: Ms. Olivia A. Alejandro
Phone: 650-952-8501
Fax: 650-424-0336

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200033-0

3M Product Safety EMC Laboratory

410 E. Fillmore Avenue
Bldg 76-1-01
St. Paul, MN 55144-1000
Contact: Mr. Greg Demaray
Phone: 612-736-4427
Fax: 612-737-1035
E-Mail: gedemaray@mmm.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200034-0

EMSL Analytical, Inc.

Westwood Business Park 1801 Royal Lane
Suite 908
Dallas, TX 75229
Contact: Mr. Thomas A. Schifani
Phone: 972-831-9725
Fax: 972-444-0884

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 200036-0

Quest Engineering Solutions, Inc.

7 Sterling Road
P.O. Box 125
N. Billerica, MA 01862
Contact: Mr. Glenn Ryan
Phone: 978-667-7000
Fax: 978-667-3388
E-Mail: info@QES.com
URL: http://www.QES.com

FCC Test Methods
Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200037-0

Western Analytical Laboratory

3017 N. San Fernando Blvd., Suite A
Burbank, CA 91504-4704
Contact: Mr. Mike Maladzhikyan
Phone: 818-845-7766
Fax: 818-845-7742
E-Mail: wal@pacificnet.net

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 200039-0

TUV Telecom Services, Inc.

1775 Old Highway 8, Suite 107/108
St. Paul, MN 55112-1891
Contact: Mr. David A. Freemore
Phone: 612-639-0775
Fax: 612-639-0873
E-Mail: dreemore@earthlink.net
URL: http://www.detecon-us.com

FCC Test Methods
Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T47	TS-013
12/T48	TS-014
12/T49	TS-016
Federal Communications Commission (FCC) Methods	
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)

(See 'How To Use This Directory' on page 7.)

NVLAP LAB CODE 200040-0

LG Electronics, Inc., Quality and Reliability Center

36, Munlae-dong, 6-ga Youngdungpo-gu
Seoul 150-096
KOREA
Contact: Mr. Tae-Yeong Oh
Phone: 82 2 630 3008
Fax: 82 2 630 3050
E-Mail: tyojlight@lge.co.kr

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200041-0

Kingston Environmental Laboratory

1600 S.W. Market
Lee's Summit, MO 64081-3109
Contact: Ms. Melissa McKee
Phone: 816-246-8746
Fax: 816-251-8102

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 200042-0

PSI, Inc.

16601 West Dakota Street
New Berlin, WI 53151-3540
Contact: Mr. Jim Updike
Phone: 414-641-0911
Fax: 414-641-0918

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200044-0

U.S. Army Center for Health Promotion and Preventive Medicine

Attn: MCHB-TS-L, Bldg. E-2100
5158 Blackhawk Road
Aberdeen Proving Ground, MD 21010-5422
Contact: Ms. Rosemary Gaffney
Phone: 410-436-2208
Fax: 410-436-8315

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 200045-0

Willamette Industries, Inc. West Coast Development Lab

9130 SW Pioneer Court, Suite D
Wilsonville, OR 97070
Contact: Mr. Gary Vosler
Phone: 503-682-4995
Fax: 503-682-4545
E-Mail: gvosler@wii.com

Commercial Products Testing

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Paper and Related Products	
09/E02	TAPPI T402-OM; ASTM D685
09/E05	TAPPI T410-OM
09/E06	TAPPI T411-OM
09/E11	TAPPI T452-OM
09/E17	TAPPI T494-OM
09/E20	TAPPI T809-OM
09/E21	TAPPI T818-OM
09/E22	TAPPI T807-OM
09/E25	TAPPI T826-PM
09/E27	TAPPI UM-403
09/E29	TAPPI T476-OM

09/H01	ASTM D642; TAPPI T804-OM
09/H24	TAPPI T802-OM
09/H28	TAPPI T810-OM
09/H29	TAPPI T811-OM
09/H30	TAPPI T821-OM

NVLAP LAB CODE 200046-0

Maxim Technologies, Inc.

662 Cromwell Avenue
St. Paul, MN 55114-1776
Contact: Mr. Richard S. Alberg
Phone: 612-659-7528
Fax: 612-659-7229
E-Mail: RALBERG.STPAUL@MAXIMMAIL.COM

Thermal Insulation Materials

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Mass, Density, and Dimensional Stability	
01/D03	ASTM C209 (Sec. 6)
01/D04	ASTM C209 (Sec. 13)
01/D05	ASTM C209 (S. 13) by D1037 (S. 100-106)
01/D06	ASTM C209 (S. 14) by D1037 (S. 107-110)
01/D07	ASTM C272
01/D18	ASTM D1622
01/D19	ASTM D2126
Related Material Properties	
01/V04	ASTM E96
Strength	
01/S02	ASTM C203
01/S03	ASTM C209 (Sec. 9)
01/S04	ASTM C209 (Sec. 10)
01/S05	ASTM C209 (Sec. 11)
01/S06	ASTM C209 (Sec. 12)
01/S11	ASTM D1621 (Proc. A)
Thermal Resistance	
01/T06	ASTM C518

Acoustical Testing Services

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P06	ASTM E90 (ISO 140, Part 3)
08/P10	ANSI S12.31 (ISO 3741)
08/P31	ASTM E336
08/P32	ASTM E1007
08/P37	ASTM E966

NVLAP LAB CODE 200047-0

National Econ Corporation

4515 Poplar Avenue, Suite 410
Memphis, TN 38117
Contact: Mr. Chester V. Ervin
Phone: 901-761-5431
Fax: 901-767-2466

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 200049-0

Intertek Testing Services NA, Inc.

7435 4th Street North
Oakdale, MN 55128
Contact: Mr. Albert Garlatti
Phone: 612-730-1188
Fax: 612-730-1282
E-Mail: agarlatti@itsqs.com
URL: http://www.worldlab.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200050-0

Cooper Lighting - Metalux Research Laboratories

1101 Southerfield Road
P.O. Box 1207
Americus, GA 31709-1207
Contact: Mr. Gregory B. Bacon
Phone: 770-486-4579
Fax: 770-486-4599

URL: http://www.cooperlighting.com/metalux/

Energy Efficient Lighting Products

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Luminaires (Lighting Fixtures)	
22/F04	IES LM-41

NVLAP LAB CODE 200051-0

Analytical Environmental Services International, Inc.

Coll Y Toste 50, St. 3A
Hato Rey, PR 00918
Contact: Mr. Ady Padan
Phone: 787-753-3431
Fax: 787-281-6669
E-Mail: YOTA1@MSN.COM

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200052-0

Dell Regulatory Test Laboratories

One Dell Way
Round Rock, TX 78682
Contact: Mr. David Staggs
Phone: 512-728-3751
Fax: 512-728-3653
E-Mail: David_Staggs@us.dell.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

Acoustical Testing Services

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
08/P24	ANSI S12.10 (ISO 7779)
08/P40	ISO 9296
08/P41	ECMA 74
08/P42	ECMA 109

NVLAP LAB CODE 200053-0

MagneTek (Lexington) Engineering Laboratory

669 Natchez Trace Drive
Lexington, TN 38351-4198
Contact: Mr. Hugh Fesmire
Phone: 901-968-4274 x429
Fax: 901-968-4164
E-Mail: hugh_fesmire@magnetek.com

Efficiency of Electric Motors

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
24/M01	IEEE 112, Method B

NVLAP LAB CODE 200054-0

Micro Analytical Laboratories, Inc.

1786 - 18th Street, Suite A
San Francisco, CA 94107-2343
Contact: Mr. Frank Raviola
Phone: 510-653-0824
Fax: 510-653-1361
E-Mail: microlab@labmicro.com
URL: http://www.labmicro.com

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 200055-0

Celestica International Inc.

844 Don Mill Road
North York, Ontario M3C 1V7
CANADA
Contact: Mr. Kenneth Long
Phone: 416-448-4937
Fax: 416-448-4924
E-Mail: klong@celestica.com
URL: http://www.celestica.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T41	TS-001
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T50	AS/NZS 3260

NVLAP LAB CODE 200056-0

EMSL Analytical, Inc.
440 Lawrence Bell Drive, Suite #2
Williamsville, NY 14221
Contact: Mr. Kenneth J. Najuch
Phone: 716-631-5887
Fax: 716-631-7693
E-Mail: knajuch@aol.com
URL: http://www.emsl.com/

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200057-0

Curtis-Straus LLC
527 Great Road
Littleton, MA 01460
Contact: Mr. Jon D. Curtis
Phone: 978-486-8880
Fax: 978-486-8828
E-Mail: jdc@world.std.com
URL: http://world.stds.com/~csweb

FCC Test Methods
Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T41	TS-001
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T50	AS/NZS 3260
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200058-0

Compaq Computer Corp. Emissions Control Lab
M/C 060607
P.O. Box 692000
Houston, TX 77070-2000
Contact: Mr. Steve Ortmann
Phone: 281-514-4897
Fax: 281-514-8029
E-Mail: Steve.Ortmann@Compaq.Com

FCC Test Methods
Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T41	TS-001
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T50	AS/NZS 3260
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200059-0

Northwest EMC, Inc.
120 South Elliott Road
Newberg, OR 97132
Contact: Mr. Dean Ghizzone
Phone: 503-537-0728
Fax: 503-537-0735
E-Mail: dghizzone@nwemc.com

FCC Test Methods
Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200061-0

Rhein Tech Laboratories, Inc.
360 Herndon Parkway, Suite #1400
Herndon, VA 20170-4824
Contact: Mr. Bruno Clavier
Phone: 703-689-0368
Fax: 703-689-2056
E-Mail: bclavier@rheintech.com
URL: http://www.rheintech.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200062-0

Professional Testing (EMI), Inc.
1601 FM 1460, Suite B
Round Rock, TX 78664
Contact: Mr. Jeffrey A. Lenk
Phone: 512-244-3371
Fax: 512-244-1846
E-Mail: jlenk@ptitest.com
URL: http://www.ptitest.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200063-0

Compatible Electronics, Inc.
2337 Troutdale Drive
Agoura, CA 91301
Contact: Mr. Jeff Klinger
Phone: 818-597-0600
Fax: 818-597-1187
E-Mail: jklinger@celectronics.com
URL: http://celectronics.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T41	TS-001
12/T42	TS-002
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T50	AS/NZS 3260
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200064-0

Compliance Engineering Services, Inc. - Taiwan

1366 Bordeaux Drive
Sunnyvale, CA 94089-1005
Contact: Mr. Scott Wang
Phone: 408-752-8166 x116
Fax: 408-752-8168

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200065-0

Compliance Eng. Svces, Inc., Compliance Certification Services

1366 Bordeaux Drive
Sunnyvale, CA 94089-1005
Contact: Mr. Scott Wang
Phone: 408-752-8166 x116
Fax: 408-752-8168

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200066-0

Washington Laboratories, Ltd.

7560 Lindbergh Drive
Gaithersburg, MD 20879
Contact: Mr. Michael F. Violette
Phone: 301-417-0220
Fax: 301-417-9069
E-Mail: mikev@wll.com
URL: http://www.wll.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

NVLAP LAB CODE 200067-0

CT&E Environmental Services Inc.

3491 Kurtz Street
San Diego, CA 92110
Contact: Mr. Craig Sobotka
Phone: 619-222-0544
Fax: 619-224-7260

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 200068-0

EMC Compliance Mgmt Group, dba Turntech Scientific & Instr., Inc.

670 National Avenue
Mountain View, CA 94043-2244
Contact: Mr. Paul F. Chen
Phone: 650-988-0900
Fax: 650-988-6647
E-Mail: pfchen@emc-turntech.com
URL: http://www.emc-turntech.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200069-0

Elliott Laboratories, Inc.

684 West Maude Avenue
Sunnyvale, CA 94086-3518
Contact: Mr. Thomas H. Parker
Phone: 408-245-7800 x236
Fax: 408-245-3499
E-Mail: tparker@elliottlabs.com
URL: http://www.elliottlabs.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
AUSTEL Technical Standards as determined under the Telecommunications Act of 1991	
12/T41	TS-001
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T50	AS/NZS 3260
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200070-0

EMC Kashima Corporation

1614 Mushihata, Omigawa-machi
Katori-gun,
Chiba-ken 289-0341
JAPAN
Contact: Mr. Masaru Nakayama
Phone: 478-82-0963
Fax: 478-82-3373
E-Mail: emc@emc-kashima.co.jp

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200071-0

Apple Computer, Inc., EMC Compliance Laboratory

1 Infinite Loop, Mailstop 26-A
Cupertino, CA 95014-2084
Contact: Mr. Robert Steinfeld
Phone: 408-974-2618
Fax: 408-862-5061
E-Mail: steinfe1@apple.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200074-0

Product Safety Engineering, Inc.

12955 Bellamy Brothers Blvd.
Dade City, FL 33525-7908
Contact: Mr. Dale E. Burns
Phone: 813-989-2360
Fax: 813-989-2373
E-Mail: dburns@pseinc.com
URL: http://www.pseinc.com

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200076-0

Instrument Specialties Co., Inc.

P.O. Box 650, Shielding Way
Delaware Water Gap, PA 18327-0136
Contact: Mr. J. Fred Gardner
Phone: 717-424-8510
Fax: 717-421-4227
E-Mail: fred_gardner@instrumentspecialties.com
URL: http://www.instrumentspecialties.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

NVLAP LAB CODE 200077-0

Taiwan Tokin EMC Eng. Corp.

9th Fl., No. 38, Fushing N. Rd.
Taipei
TAIWAN
Contact: Mr. Steven Chang
Phone: 886-2-26092415
Fax: 886-2-26099303
E-Mail: ttemc@tpts1.seed.net.tw

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200078-0

Compaq Computer Corp. EMC Test Facility

301 Rockrimmon Blvd. South
Colorado Springs, CO 80919-2398
Contact: Mr. Dennis Laurence
Phone: 719-548-2080
Fax: 719-548-2070

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

NVLAP LAB CODE 200079-0

Sporton International, Inc.

6F, No. 106, Sec. 1, Hsin Tai Wu Road
Hsi Chih
Taipei Hsien
TAIWAN
Contact: Mr. W. L. Huang
Phone: 886-2-2696-2468
Fax: 886-2-2696-2255

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200080-0

Continental Envirotech, Inc.

646 West Broadway Road, Suite 401
Mesa, AZ 85210-1212
Contact: Mr. Stephen P. Kovac
Phone: 602-844-1710
Fax: 602-844-1752

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 200081-0

Advanced Energy, Industrial Energy Laboratory

909 Capability Drive, #2100
Raleigh, NC 27606-3870
Contact: Mr. Jeffrey L. Farlow
Phone: 919-857-9013
Fax: 919-832-2696
E-Mail: jfarlow@aec.ncsu.edu
URL: http://www.aec.ncsu.edu

Efficiency of Electric Motors

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
24/M01	IEEE 112, Method B

NVLAP LAB CODE 200082-0

PDE Laboratories

950 Calle Negocio
San Clemente, CA 92673-6201
Contact: Mr. Dave Farrant
Phone: 949-361-9189
Fax: 949-361-9597
E-Mail: testsvcs@pdelabs.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200083-0

Testwell Laboratories, Inc./Testwell Industries, Inc.

47 Hudson Street
Ossining, NY 10562
Contact: Mr. V. Reddy Kancharla
Phone: 914-762-9000
Fax: 914-762-9638

URL: http://www.testwellcraig.com

Construction Materials Testing

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Admixtures	
02/A35	ASTM C233
Aggregates	
02/A03	ASTM C29
02/A04	ASTM C40
02/A06	ASTM C88
02/A07	ASTM C117
02/A09	ASTM C127
02/A10	ASTM C128

02/A11	ASTM C131
02/A12	ASTM C136
02/A13	ASTM C142
02/A15	ASTM D75
02/A44	ASTM C566
02/A46	ASTM C535
Cement	
02/A17	ASTM C109
02/A18	ASTM C114
02/A21	ASTM C157
02/A22	ASTM C183
02/A26	ASTM C191
02/A31	ASTM C305
Concrete	
02/A01	ASTM C39
02/A02	ASTM C617
02/A40	ASTM C78
02/A41	ASTM C192
02/A43	ASTM C1064
02/A45	ASTM C42
02/A48	ASTM C856
02/G01	ASTM C31/C172/C143/C138/C231
Soil and Rock	
02/L02	ASTM D422
02/L04	ASTM D698
02/L05	ASTM D854
02/L06	ASTM D1140
02/L07	ASTM D1556
02/L08	ASTM D1557
02/L13	ASTM D2216
02/L16	ASTM D2487
02/L17	ASTM D2488
02/L20	ASTM D4318
02/L23	ASTM D2922
02/L24	ASTM D2974
02/L25	ASTM D3017
Standard Practices	
02/A38	ASTM E329
02/A39	ASTM C1077
Steel Materials	
02/S01	ASTM A370 (Sec. 5-13)/E8
02/S07	ASTM E709
02/S08	ASTM E165

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)

Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200084-0

Windermere Info. Tech. Sys.
Military/Commercial Compliance Lab.

401 Defense Highway
Annapolis, MD 21401
Contact: Mr. Douglas G. Frazee
Phone: 410-266-1793
Fax: 410-266-1751
E-Mail: dfrazee@windermeregroup.com
URL: http://www.windermeregroup.com/mcl/index.html

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200085-0

Global EMC Standard Tech. Corp.

No. 3, Pau-Tou-Tsuo Valley
Chia-Pau Tsuen, Lin Kou Hsiang
Taipei County
TAIWAN
Contact: Mr. Raymond Chang
Phone: 886-2-26035321
Fax: 886-2-26035325
E-Mail: GESTEK@MS5.HINET.NET

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200086-0

Radiation Technology, Inc.

424 Roberson Lane
San Jose, CA 95112
Contact: Mr. John Howard
Phone: 408-441-6077
Fax: 408-441-6078
E-Mail: RADEMI@AOL

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
	Australian Standards referred to by clauses in AUSTEL Technical Standards
12/T51	AS/NZS 3548
	Federal Communications Commission (FCC) Methods
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
	International Special Committee on Radio Interference (CISPR) Methods
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200087-0

Rogers Labs, Inc.

4405 W. 259th Terrace
Louisburg, KS 66053
Contact: Mr. Scot D. Rogers
Phone: 913-837-3214
Fax: 913-837-3214
E-Mail: rogerslb@sound.net

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
	Australian Standards referred to by clauses in AUSTEL Technical Standards
12/T51	AS/NZS 3548
	Federal Communications Commission (FCC) Methods
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
	International Special Committee on Radio Interference (CISPR) Methods
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200088-0

Toshiba/Houston Test Laboratory

13131 W. Little York Road
Houston, TX 77041-5807
Contact: Mr. Willard Gray
Phone: 713-466-0277
Fax: 713-466-8773

Efficiency of Electric Motors

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
24/M01	IEEE 112, Method B

NVLAP LAB CODE 200089-0

Electronic Compliance Laboratories, Inc.

1249 Birchwood Drive
Sunnyvale, CA 94089
Contact: Mr. Chris Byleckie
Phone: 408-747-1490
Fax: 408-747-1495
E-Mail: chris@eclabs.com
URL: http://www.eclabs.com

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
	Australian Standards referred to by clauses in AUSTEL Technical Standards
12/T51	AS/NZS 3548
	Federal Communications Commission (FCC) Methods
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
	International Special Committee on Radio Interference (CISPR) Methods
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

(See 'How To Use This Directory' on page 7.)

NVLAP LAB CODE 200090-0

ProScience Analytical Services, Inc.

22 Cummings Park
Woburn, MA 01801-2122
Contact: Mr. Adrian Stanca
Phone: 781-935-3212
Fax: 781-932-4857
E-Mail: PASI96@aol.com

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: December 31, 1999

Airborne Asbestos Analysis (TEM)

Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200091-0

IBM Rochester EMC Lab

3605 North Highway 52, Department 515
Rochester, MN 55901-7829
Contact: Mr. John S. Maas
Phone: 507-253-2426
Fax: 507-253-1317
E-Mail: johnmaas@us.ibm.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200092-0

EMCE Engineering, Inc.

44366 South Grimmer Boulevard
Fremont, CA 94538-6385
Contact: Mr. Stephen A. Sawyer
Phone: 510-490-4307
Fax: 510-490-3441
E-Mail: EMCEEngrg@aolcom

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)

NVLAP LAB CODE 200093-0

UltraTech Engineering Labs Inc.

33-4181 Sladeview Crescent
Mississauga, Ontario L5L 5R2
CANADA
Contact: Mr. Victor Kee
Phone: 905-569-2550
Fax: 905-569-2480
E-Mail: vhk.ultratech@sympatico.ca

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200094-0

EMC International, Inc.

762 Park Avenue
Youngsville, NC 27596
Contact: Mr. Dale S. Albright
Phone: 919-554-0901
Fax: 919-556-2043
E-Mail: emcamerica@aol.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200095-0

Chopra-Lee, Inc.

1815 Love Road
P.O. Box 567
Grand Island, NY 14072-0567
Contact: Mr. Paul S. Chopra
Phone: 716-773-7625
Fax: 716-773-7624
E-Mail: pschopra@msn.com
URL: http://www.chopra-lee-inc.com

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: December 31, 1999

Airborne Asbestos Analysis (TEM)

Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200096-0

Key Tronic Corp.

4424 N. Sullivan Road
P.O. Box 14687
Spokane, WA 99214-0687
Contact: Mr. Robert E. Schwartz
Phone: 509-927-5274
Fax: 509-927-5258
E-Mail: bschwart@keytronic.com

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200097-0

PEP Testing Laboratory

12-3 FL. No. 27-1,Lane 169, Kang Ning St
Hsi-Chi
Taipei Hsien
TAIWAN
Contact: Mr. Peter Kao
Phone: 886-2-2692-2097
Fax: 886-2-2695-6236
E-Mail: peplab@top2.ficnet.net.tw

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200098-0

Northern Telecom BVW Lab

250 Sidney Street
Belleville, Ontario K8N5B7
CANADA
Contact: Mrs. Seham Fawzy
Phone: 613-966-0100 x3145
Fax: 613-967-5364

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200099-0

Spectrum Research & Testing Laboratory, Inc.

No. 101-10, Ling 8, Shan-Tong Li
Chung-Li, Taoyuan
TAIWAN
Contact: Mr. Cheng-Yang Ho
Phone: 011-886-3-4987684
Fax: 011-886-3-4986528
E-Mail: info@srtlab.com
URL: http://www.srtlab.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200101-0

Fountain Compliance Laboratory

50 Randolph Road
Somerset, NJ 08873-1240
Contact: Mr. Wei Li
Phone: 732-560-9010
Fax: 732-560-9173
E-Mail: lee@ftn.com

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200102-0

Advance Data Technology Corporation

No. 47, 14 Ling, Chia Pau Tsuen,
Lin Kou Hsiang
Taipei Hsien
TAIWAN
Contact: Mr. Harris W. Lai
Phone: 886-2-6032180
Fax: 886-2-6022943
E-Mail: harris@mail.adt.com.tw

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200103-0

Hayes Microcomputer Products, Inc.
P.O. Box 105203
Atlanta, GA 30348-5203
Contact: Mr. Bill Mason
Phone: 770-840-9200
Fax: 770-447-0178

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200104-0

Asbestos TEM Laboratories, Inc.
952 Greg Street
Sparks, NV 89431
Contact: Mr. R. Mark Bailey
Phone: 510-528-0108
Fax: 510-528-0109
E-Mail: MBaileyASB@aol.com

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200107-0

Toshiba Corp., Ome Works
2-9 Suehiro-cho
Ome Tokyo 198-8710
JAPAN
Contact: Mr. N. Tsumura
Phone: 81-428-33-1170
Fax: 81-428-30-7911

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200109-0

A-Pex International Co., Ltd. Yokowa Laboratory
108 Yokowa-cho, Ise-shi
Mie-ken 516-1106
JAPAN
Contact: Mr. Michihisa Yamazaki
Phone: 81-596-24-6717
Fax: 81-596-27-5631
E-Mail: yamazaki@a-pex.co.jp
URL: http://www.a-pex.co.jp

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance

characteristics of information technology equipment

NVLAP LAB CODE 200111-0

TUV Rheinland of North America, Inc.

12 Commerce Road
Newtown, CT 06470-1607
Contact: Mr. Timothy M. Dwyer
Phone: 203-426-0888 x104
Fax: 203-270-8883

URL: http://www.us.tuv.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200112-0

IBM Austin EMC

11400 Burnet Road, M.S. 4469
Austin, TX 78758-3493
Contact: Mr. Jerry W. Scibielski
Phone: 512-838-5816
Fax: 512-838-7101
E-Mail: scib@us.ibm.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance

characteristics of information technology equipment

NVLAP LAB CODE 200114-0

Cisco Systems, Inc.

170 West Tasman Drive
San Jose, CA 95134-1706
Contact: Mr. Andrew Griffin
Phone: 408-527-1810
Fax: 408-526-4184
E-Mail: agriffin@cisco.com

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200116-0

Nemko EESI, Inc.

11696 Sorrento Valley Road, Suite F
San Diego, CA 92121
Contact: Mr. Harry H. Hodes
Phone: 619-259-4952
Fax: 619-259-7170
E-Mail: techops@eesi.com
URL: http://www.eesi.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance

characteristics of information technology equipment

NVLAP LAB CODE 200117-0

Universal Compliance Laboratories

775 B Mabury Road
San Jose, CA 95133
Contact: Mr. Bob Cole
Phone: 408-453-8744
Fax: 408-453-8747
E-Mail: bob_ucl@msn.com
URL: http://www.usl1.com

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200118-0

Electronic Research & Service Organization/ITRI

K500 Bldg 17, 195 Sec. 4
Chung Hsing Road, Chutung
Hsinchu
TAIWAN
Contact: Mr. Paul Y. Liau
Phone: 886-3-591-5994
Fax: 886-3-582-7520
E-Mail: PYLA@erso.itri.org.tw

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200119-0

Garwood Laboratories, Inc.

565 Porter Way
Placentia, CA 92870-6454
Contact: Mr. Robert Lynch
Phone: 714-572-2027
Fax: 714-572-2025
E-Mail: bobl.garwoodtestlabs.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200120-0

Chemitox EMC Research, Inc.

14979, Egusa, Sudama-cho, Kitakoma-gun
Yamanashi-ken 408-01
JAPAN
Contact: Mr. Kohichi Nakayama
Phone: 81-551-42-4411
Fax: 81-551-20-6002

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz

(See 'How To Use This Directory' on page 7.)

International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200121-0

Cabletron Systems, Inc.

35 Industrial Way
P.O. Box 5005
Rochester, NH 03867-5005
Contact: Mr. John Ballew
Phone: 603-337-1742
Fax: 603-337-1764
E-Mail: jballew@ccmailpc.ctron.com

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200122-0

LambdaMetrics, Inc.

407 South Blue Ridge Parkway (78613)
P.O. Box 1029
Cedar Park, TX 78630-1029
Contact: Mr. Ben Bibb
Phone: 512-219-8218
Fax: 512-219-8218
E-Mail: bennbibb@lambdametrics.com

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200124-0

White Environmental Consultants Inc.

731 I Street, Suite 201
Anchorage, AK 99501
Contact: Mr. Sean Fitzgerald
Phone: 907-258-8661
Fax: 907-258-8662
E-Mail: Whiteenv@customcpu.com

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200125-0

Paradyne Corporation

8545 126th Avenue N.
P.O. Box 2826
Largo, FL 33773-2826
Contact: Mr. Tom Wissman
Phone: 727-530-2775
Fax: 727-532-5552
E-Mail: twissman@eng.paradyne.com

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22 IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200126-0

Walker Bolt Manufacturing Co.

10202 Airline Drive
P.O. Box 38502
Houston, TX 77238-8502
Contact: Mr. Tommie D. Helms
Phone: 281-448-4350 x230
Fax: 281-999-1979

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*

Chemical Analysis

Optical emission spectrochemical analysis

FA/457 ASTM E415

Dimensional Inspection

Dimensions of ISO grade A and B fasteners

FA/487 DIN 267, Part 5

Dimensions of ISO grade C fasteners

FA/488 DIN 267, Part 5

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/403 ANSI/ASME B18.18.1M
FA/486 MIL-STD-120 (W/ Notice dtd 9 SEP 63)

Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap

FA/405 ANSI/ASME B18.18.3M
FA/406 ANSI/ASME B18.18.4M
FA/493 MIL-STD-120 (W/ Notice dtd 9SEP 63)

External thread parameters - system 21

FA/379 ANSI/ASME B1.3M
FA/380 FED-STD-H28/20

External thread parameters - system 22

FA/381 ANSI/ASME B1.3M
FA/382 FED-STD-H28/20

External thread parameters - system 23

FA/385 ANSI/ASME B1.3M
FA/386 FED-STD-H28/20

Internal thread parameters - system 21

FA/391 ANSI/ASME B1.3M
FA/392 FED-STD-H28/20

Internal thread parameters - system 22

FA/393 ANSI/ASME B1.3M
FA/394 FED-STD-H28/20

Internal thread parameters - system 23

FA/397 ANSI/ASME B1.3M
FA/398 FED-STD-H28/20

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/265 ASTM A370 Sec. A3.2.1.4
FA/266 ASTM F606 Sec. 3.4.1-3.4.3
FA/267 ASTM F606M Sec. 3.4.1-3.4.3
FA/273 SAE J429

Brinell hardness of fasteners

FA/185 ASTM A370 Sec. 16
FA/186 ASTM E10
FA/491 ASTM E18

Charpy impact (v-notch) testing

FA/211 ASTM A370 Sec. 19-28
FA/212 ASTM E23

Hardness preparation

FA/464 ASTM F606M
FA/482 ASTM F606

Microhardness of fasteners

FA/189 ASTM E384

Proof load of full-size externally threaded fasteners

FA/225 ASTM A370 Sec. A3.2.1.1-A3.2.1.3
FA/226 ASTM F606 Sec. 3.2.1-3.2.3
FA/228 ISO 898-1 Sec. 8.4
FA/229 SAE J429 Sec. 5.3
FA/467 ASTM F606M Sec. 3.2.1-3.2.3

Proof load of internally threaded fasteners (nuts)

FA/235 ASTM A370 Sec. A3.5.1
FA/236 ASTM F606 Sec. 4.2
FA/237 ASTM F606M Sec. 4.2
FA/239 ISO 898-2 Sec. 8.1
FA/241 SAE J995 Sec. 5.1

Rockwell hardness of fasteners

FA/196 ASTM A370 Sec. 18
FA/197 ASTM E18
FA/201 MIL-STD-1312-6

Tension testing of machined specimens from externally threaded fasteners

FA/278 ASTM A370
FA/279 ASTM F606
FA/280 ASTM F606M
FA/282 ISO 898-1
FA/283 SAE J429

Total extension at fracture of externally threaded fasteners

FA/285 ASTM F606
FA/286 ASTM F606M

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/492 ASTM E92

Wedge tensile strength of full-size threaded fasteners

FA/289 ASTM A370
FA/290 ASTM F606 Sec. 3.5
FA/291 ASTM F606M Sec. 3.5
FA/294 ISO 898-1 Sec. 8.5
FA/468 SAE J429 Sec. 5.5

Metallography

Decarburization and case depth measurement in fasteners

FA/324	ISO 898-1
FA/328	SAE J121
FA/483	ASTM A574 Sec. 12

Macroscopic examination of fasteners by etching

FA/484	ASTM E381

Nondestructive Inspection

Liquid penetrant inspection of fasteners

FA/367	ASTM E165
FA/370	MIL-STD-271
FA/371	MIL-STD-6866

Magnetic particle inspection of fasteners

FA/376	MIL-STD-271
FA/485	ASTM E1444

NVLAP LAB CODE 200128-0

The Perryman Company

213 Vandale Drive
Houston, PA 15342
Contact: Ms. Shirley J. Kemper
Phone: 724-746-9390
Fax: 724-746-9392

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

Chemical Analysis

Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen

NVLAP Code	*Designation*
FA/472	ASTM E1447

Dimensional Inspection

Surface texture

FA/554	AMS 4928

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/530	ASTM E8

Double shear of externally threaded fasteners

FA/257	MIL-STD-1312-13

Rockwell hardness of fasteners

FA/197	ASTM E18

Metallography

Determination of grain size of fasteners

FA/331	ASTM E112
FA/550	ASTM E3

Macroscopic examination of fasteners by etching

FA/551	ASTM E3

Microscopic examination of fasteners by etching

FA/512	ASTM E407
FA/552	ASTM E3
FA/553	AMS 2643

NVLAP LAB CODE 200129-0

AHD

92723 M-152
Dowagiac, MI 49047
Contact: Mr. Edmund (Ted) Chaffee
Phone: 616-424-7014

FCC Test Methods

Accreditation Valid Through: June 30, 1999

Australian Standards referred to by clauses in AUSTEL Technical Standards

NVLAP Code	*Designation*
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200130-0

NASA-Lewis Research Center

21000 Brookpark Road, Mail Stop 6-4
Cleveland, OH 44135-3191
Contact: Ms. Priscilla Mobley
Phone: 216-433-8333
Fax: 216-433-8719
E-Mail: priscilla.a.mobley@lerc.nasa.gov

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 200131-0

Environmental Testing and Monitoring Services, Inc.

2425 Boward Parkway, Suite 107
Virginia Beach, VA 23454
Contact: Mr. Scott J. Eggleston
Phone: 757-498-7873
Fax: 757-498-7896

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: March 31, 1999

(See 'How To Use This Directory' on page 7.)

NVLAP LAB CODE 200132-0

USG Research-Systems Evaluation Laboratory

700 N. Highway 45
Libertyville, IL 60048-1296
Contact: Mr. Richard T. Kaczkowski
Phone: 847-970-52559
Fax: 847-362-4871
E-Mail: rkaczkowski@isgres.com

Acoustical Testing Services

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P06	ASTM E90 (ISO 140, Part 3)
08/P33	ASTM E1111
08/P34	ASTM E1414 (AMA-1-11-67)(ISO 140, Part 9)

NVLAP LAB CODE 200133-0

Electronics Testing Center, Taiwan

No.8, Lane 29, Wen-Ming Rd
Lo-Shan Tsun, Kui-shan Hsiang
Taoyuan Hsien 333
TAIWAN
Contact: Mr. Jing-Jung Hong
Phone: 886-03-328-0026 x272
Fax: 886-03-328-0034
E-Mail: hong@etc.org.tw

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200134-0

Marathon Electric - Wausau Engineering Lab.

100 East Randolph Street
P.O. Box 8003
Wausau, WI 54402-8003
Contact: Mr. Gene Sickler
Phone: 715-675-3311 x4155
Fax: 715-675-8043

Efficiency of Electric Motors

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
24/M01	IEEE 112, Method B

NVLAP LAB CODE 200135-0

AST Research, Inc. EMC Lab.

16225 Alton Parkway
Irvine, CA 92618-3618
Contact: Mr. Jozef Baran
Phone: 949-727-7654
Fax: 949-727-8329

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200136-0

Wilson-Garner Company

40935 Production Drive
Harrison Township, MI 48045-3422
Contact: Mr. Timothy Pinchback
Phone: 810-466-5800
Fax: 810-465-4408

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of fasteners - flange screw heads and flange nuts	
FA/419	ANSI/ASME B18.2.3.4M
FA/420	ANSI/ASME B18.2.3.9M
Dimensions of fasteners - straightness	
FA/423	ANSI/ASME B18.2.1
FA/755	ANSI B18.2.3.1M
Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap	
FA/405	ANSI/ASME B18.18.3M
FA/406	ANSI/ASME B18.18.4M
External thread parameters - system 21	
FA/379	ANSI/ASME B1.3M
External thread parameters - system 22	
FA/381	ANSI/ASME B1.3M
Mechanical and Physical Testing and Inspection	
Adhesion of metallic coatings on fasteners	
FA/143	ASTM B571
FA/145	SAE J207
Axial tensile strength of full-size threaded fasteners	
FA/266	ASTM F606 Sec. 3.4.1-3.4.3
FA/267	ASTM F606M Sec. 3.4.1-3.4.3
FA/271	MIL-STD-1312-8
FA/273	SAE J429
FA/274	SAE J1216
Hydrogen embrittlement (stress durability) of externally threaded fasteners	
FA/176	MIL-STD-1312-5
Measurement of fastener coating thickness - dimensional change method	
FA/495	MIL-STD-1312-12
Measurement of fastener coating thickness - magnetic methods	
FA/155	ASTM E376
FA/159	MIL-STD-1312-12
Proof load of full-size externally threaded fasteners	
FA/226	ASTM F606 Sec. 3.2.1-3.2.3
FA/229	SAE J429 Sec. 5.3
FA/230	SAE J1216 Sec. 3.3
FA/467	ASTM F606M Sec. 3.2.1-3.2.3
Rockwell hardness of fasteners	
FA/197	ASTM E18
FA/201	MIL-STD-1312-6
Rockwell superficial hardness of fasteners	
FA/205	ASTM E18
FA/209	MIL-STD-1312-6
Wedge tensile strength of full-size threaded fasteners	
FA/289	ASTM A370
FA/290	ASTM F606 Sec. 3.5
FA/291	ASTM F606M Sec. 3.5
FA/295	MIL-STD-1312-8
FA/468	SAE J429 Sec. 5.5
FA/469	SAE J1216 Sec. 3.6
Nondestructive Inspection	
Magnetic particle inspection of fasteners	
FA/485	ASTM E1444

NVLAP LAB CODE 200137-0

Philips Electronics Industries (TAIWAN) Ltd.

5, Tze Chiang 1 Road, Chungli Ind. Park
P.O. Box 123, Chungli
Chungli, Taoyuan
TAIWAN
Contact: Mr. Ronnie Yang
Phone: 886-2-454-9862
Fax: 886-3-454-9887
E-Mail: ronnie.yang@tw.ccmail.philips.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200138-0

Hewlett Packard, Product Test Lab, San Diego

16399 W. Bernardo Drive
San Diego, CA 92127-1899
Contact: Mr. John Hall
Phone: 619-655-8236
Fax: 619-655-5786
E-Mail: john_hall@HP.com

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz

12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200139-0

PB Fasteners

1700 W. 132nd Street
P.O. Box 1157
Gardena, CA 90249-0157
Contact: Mr. Verne Benson
Phone: 310-323-6222
Fax: 310-329-4685

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

Dimensional Inspection

Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets

NVLAP Code	*Designation*
FA/539	SAE AS 870
FA/540	MIL-STD-33787

External thread parameters - system 21

FA/379	ANSI/ASME B1.3M
FA/380	FED-STD-H28/20
FA/528	MIL-S-7742
FA/533	SAE AS 8879

External thread parameters - system 22

FA/381	ANSI/ASME B1.3M
FA/382	FED-STD-H28/20
FA/383	MIL-S-7742
FA/534	SAE AS 8879

External thread parameters - system 23

FA/385	ANSI/ASME B1.3M
FA/386	FED-STD-H28/20
FA/388	MIL-S-8879
FA/535	SAE AS 8879

Internal thread parameters - system 21

FA/391	ANSI/ASME B1.3M
FA/392	FED-STD-H28/20
FA/529	MIL-S-7742
FA/536	SAE AS 8879

Internal thread parameters - system 22

FA/393	ANSI/ASME B1.3M
FA/394	FED-STD-H28/20
FA/395	MIL-S-7742
FA/537	SAE AS 8879

Internal thread parameters - system 23

FA/397	ANSI/ASME B1.3M
FA/398	FED-STD-H28/20
FA/399	MIL-S-7742
FA/538	SAE AS 8879

Surface texture

FA/439	ANSI/ASME B46.1

Mechanical and Physical Testing and Inspection

Adhesion of metallic coatings on fasteners

FA/532	BMS 10-85M Sec. 8.2

Axial tensile strength of full-size threaded fasteners

FA/271	MIL-STD-1312-8

Double shear of externally threaded fasteners

FA/257	MIL-STD-1312-13

Fatigue of full-size threaded fasteners

FA/183	MIL-STD-1312-11

Hydrogen embrittlement (stress durability) of externally threaded fasteners

FA/176	MIL-STD-1312-5

Magnetic permeability

FA/215	MIL-I-17214

Measurement of fastener coating thickness - eddy-current method

FA/150	FED TM STD NO. 151 Method 520.1
FA/152	MIL-STD-1312-12

Microhardness of fasteners

FA/189	ASTM E384
FA/193	MIL-STD-1312-6

Permanent set test of self-locking nuts

FA/109	MIL-N-25027

Recess strength test in both the installation and removal directions

FA/476	MIL-STD-1312-25

Reusability test of self-locking internally threaded fasteners

FA/522	MIL-STD-1312-31

Rockwell hardness of fasteners

FA/201	MIL-STD-1312-6

Rockwell superficial hardness of fasteners

FA/209	MIL-STD-1312-6

Salt spray testing of fasteners

FA/166	ASTM B117
FA/168	MIL-STD-1312-1

Single shear of externally threaded fasteners

FA/256	MIL-STD-1312-20

Stress rupture of fasteners

FA/262	MIL-STD-1312-10

Tension testing of machined specimens from externally threaded fasteners

FA/475	ASTM E8
FA/526	MIL-STD-1312-8

Test for embrittlement of metallic coated externally threaded fasteners

FA/525	MIL-STD-1312-5

Torque-out test

FA/523	MIL-STD-1312-31

Wedge tensile strength of full-size threaded fasteners

FA/295	MIL-STD-1312-8

Wrench torque test of externally wrenched nuts of spline and hexagon and double hexagon (1

FA/524	MIL-STD-1312-31

(See 'How To Use This Directory' on page 7.)

Yield strength of full-size externally threaded fasteners
FA/303 MIL-STD-1312-8

Metallography

Decarburization and case depth measurement in fasteners
FA/521 ASTM E384
Determination of grain size of fasteners
FA/331 ASTM E112
Macroscopic examination of fasteners by etching
FA/511 ASTM E340
Microscopic examination of fasteners by etching
FA/512 ASTM E407

Nondestructive Inspection

Liquid penetrant inspection of fasteners
FA/527 ASTM E1417
Magnetic particle inspection of fasteners
FA/485 ASTM E1444

NVLAP LAB CODE 200140-0

TAO/TA2 EMC Laboratory

255, JEN-HO Road Sec 2, Tachi
Taoyuan
TAIWAN
Contact: Mr. Steve Wang
Phone: 886-3-390-0000
Fax: 886-3-389-4346
E-Mail: Steve.Wang@digital.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
	Australian Standards referred to by clauses in AUSTEL Technical Standards
12/T51	AS/NZS 3548
	Federal Communications Commission (FCC) Methods
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
	International Special Committee on Radio Interference (CISPR) Methods
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200141-0

MAC Fasteners, Inc.

1544 S. Main Street
Ottawa, KS 66067
Contact: Mr. Donald C. Krenkel
Phone: 785-242-8812
Fax: 785-242-4616

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

NVLAP
Code *Designation*

Dimensional Inspection

External thread parameters - system 21
FA/380 FED-STD-H28/20
External thread parameters - system 22
FA/382 FED-STD-H28/20

Mechanical and Physical Testing and Inspection

Adhesion of metallic coatings on fasteners
FA/541 QQ-P-416 Sec. 4.6.2
Axial tensile strength of full-size threaded fasteners
FA/799 NASM 1312-8
Double shear of externally threaded fasteners
FA/880 NASM 1312-13
Intergranular corrosion susceptibility in austentic stainless steel fasteners - nitric aci
FA/173 ASTM A262 Sec. 15-21, Practice C
Measurement of fastener coating thickness - dimensional change method
FA/874 NASM 1312-12
Measurement of fastener coating thickness - microscopical method
FA/873 NASM 1312-12
Microhardness of fasteners
FA/877 NASM 1312-6
Recess strength test in both the installation and removal directions
FA/886 NASM 1312-25
Rockwell hardness of fasteners
FA/878 NASM 1312-6
Rockwell superficial hardness of fasteners
FB/1004 NASM 1312-6

Metallography

Decarburization and case depth measurement in fasteners
FA/521 ASTM E384
Determination of grain size of fasteners
FA/331 ASTM E112
Macroscopic examination of fasteners by etching
FA/511 ASTM E340
Microscopic examination of fasteners by etching
FA/512 ASTM E407

Nondestructive Inspection

Liquid penetrant inspection of fasteners

FA/371 MIL-STD-6866

Magnetic particle inspection of fasteners

FA/485 ASTM E1444

NVLAP LAB CODE 200142-0

Lockheed Martin Control Systems EMI Laboratory

600 Main Street
Johnson City, NY 13790-1888
Contact: Mr. Paul Heiland
Phone: 607-770-3771
Fax: 607-770-2954
E-Mail: paul.h.heiland.jr@lmco.co

MIL-STD-462 Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A01	MIL-STD-462 Method CE01
12/A06	MIL-STD-462 Method CE03
12/A12	MIL-STD-462 Method CE07
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B05	MIL-STD-462 Method CS06
Radiated Emissions:	
12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
Radiated Susceptibility:	
12/E02	MIL-STD-462 Method RS02
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)

NVLAP LAB CODE 200143-0

Ivaco Rolling Mills, Chemistry Laboratory

Highway 17, P.O. Box 322
L'Orignal Ontario K0B 1K0
CANADA
Contact: Mr. William V. Berry
Phone: 613-675-4671 x237
Fax: 613-675-2463
E-Mail: wberry@ivacorm.com

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Chemical Analysis	
Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen	
FA/455	ASTM E1019
Optical emission spectrochemical analysis	
FA/457	ASTM E415

NVLAP LAB CODE 200144-0

Dexter Fastener Technologies, Inc.

2110 Bishop Circle E.
Dexter, MI 48130
Contact: Mr. Ken Summersett
Phone: 734-426-5200
Fax: 734-425-5870
E-Mail: dextech@midspring.com

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Chemical Analysis	
Optical emission spectrochemical analysis	
FA/457	ASTM E415
Dimensional Inspection	
Dimensions of ISO grade A and B fasteners	
FA/407	ISO 3269
FA/589	JIS B1071
FA/590	JIS B1091
Dimensions of fasteners - straightness	
FA/423	ANSI/ASME B18.2.1
Dimensions of general purpose fasteners and high-volume machine assembly fasteners	
FA/404	ANSI/ASME B18.18.2M
Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap	
FA/406	ANSI/ASME B18.18.4M
External thread parameters - ISO	
FA/390	ISO 1502
External thread parameters - system 21	
FA/379	ANSI/ASME B1.3M
FA/583	JIS B0251
FA/584	JIS B0252
External thread parameters - system 22	
FA/381	ANSI/ASME B1.3M
External thread parameters - system 23	
FA/385	ANSI/ASME B1.3M
Mechanical and Physical Testing and Inspection	
Axial tensile strength of full-size threaded fasteners	
FA/266	ASTM F606 Sec. 3.4.1-3.4.3
FA/270	ISO 898-1 Sec. 8.2
FA/273	SAE J429
FA/574	JIS B1051 Sec. 4.2.2
Fatigue of full-size threaded fasteners	
FA/182	ISO 3800-1
FA/183	MIL-STD-1312-11
FA/570	JIS B1081
Hardness preparation	
FA/482	ASTM F606
Head soundness testing	
FA/614	ISO 898-1 Sec. 8.7
FA/615	JIS B1051 Sec. 4.2.6

Measurement of fastener coating thickness - coulometric method

FA/567 ASTM B504

Measurement of fastener coating thickness - microscopical method

FA/160 ASTM B487

Microhardness of fasteners

FA/189 ASTM E384
FA/191 ISO 6507-2

Proof load of full-size externally threaded fasteners

FA/226 ASTM F606 Sec. 3.2.1-3.2.3
FA/228 ISO 898-1 Sec. 8.4
FA/229 SAE J429 Sec. 5.3
FA/573 JIS B1051 Sec. 4.2.4

Rockwell hardness of fasteners

FA/197 ASTM E18
FA/200 ISO 6508
FA/572 JIS Z2245
FA/616 JIS B1051 Sec. 4.3
FA/617 ISO 898-1 Sec. 8.9

Rockwell superficial hardness of fasteners

FA/205 ASTM E18

Salt spray testing of fasteners

FA/166 ASTM B117
FA/568 ISO 9227
FA/569 JIS Z2371

Tension testing of machined specimens from externally threaded fasteners

FA/279 ASTM F606 Sec. 3.6
FA/282 ISO 898-1
FA/283 SAE J429
FA/580 ISO 6892
FA/581 JIS B1051 Sec. 4.2
FA/582 JIS Z2241

Torque-tension of full-size threaded fasteners

FA/576 JIS B1084

Total extension at fracture of externally threaded fasteners

FA/285 ASTM F606 Sec. 3.7

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/571 JIS Z2244

Wedge tensile strength of full-size threaded fasteners

FA/290 ASTM F606 Sec. 3.5
FA/294 ISO 898-1 Sec. 8.5
FA/468 SAE J429 Sec. 5.5
FA/575 JIS B1051 Sec. 4.2.3

Yield strength of full-size externally threaded fasteners

FA/298 ASTM F606 Sec. 3.2.4

Metallography

Decarburization and case depth measurement in fasteners

FA/323 ASTM E1077

Determination of grain size of fasteners

FA/331 ASTM E112

Macroscopic examination of fasteners by etching

FA/511 ASTM E340

Microscopic examination of fasteners by etching

FA/512 ASTM E407

Surface discontinuities of externally threaded fasteners

FA/357 ASTM F788/788M
FA/359 ISO 6157-1

NVLAP LAB CODE 200145-0

Neutron Engineering Inc.

1Fl. No. 20, Alley 50, Lane 119
Dong Hwu Road, P.O. Box 6-158 Nei Hwu
Taipei
TAIWAN
Contact: Mr. George Yao
Phone: 886-2-26336872
Fax: 886-2-26334578
E-Mail: neutron1@ms10.hinet.net

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code *Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51 AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22 IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200147-0

Electro Magnetic Test, Inc.

1547 Plymouth Street
Mountain View, CA 94043
Contact: Mr. Jay Gandhi
Phone: 650-965-4000
Fax: 650-965-3000

FCC Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code *Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51 AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz

12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200148-0

BarTech Inc. - Chemical Laboratory

1001 Main Street, Gate #3
Johnstown, PA 15909
Contact: Mr. Alan K. O'Donnell
Phone: 814-533-7333
Fax: 814-533-7319
E-Mail: alanod@porodigy.net

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

Chemical Analysis

NVLAP Code	*Designation*
Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen	
FA/455	ASTM E1019
Optical emission spectrochemical analysis	
FA/457	ASTM E415
Solution chemical analysis	
FA/448	ASTM E350
FA/531	ASTM E663

NVLAP LAB CODE 200150-0

Indiana Automotive Fasteners, Inc.

1300 West Anderson Boulevard
Greenfield, IN 46140-2777
Contact: Mr. Pete Murray
Phone: 317-467-0100
Fax: 317-467-0400

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

Dimensional Inspection

NVLAP Code	*Designation*
Dimensions of general purpose fasteners and high-volume machine assembly fasteners	
FA/607	JIS B1071
FA/675	JIS B1012

Mechanical and Physical Testing and Inspection

Adhesion of metallic coatings on fasteners	
FA/595	JIS H8504
Axial tensile strength of full-size threaded fasteners	
FA/267	ASTM F606M Sec. 3.4.1-3.4.3
FA/270	ISO 898-1 Sec. 8.2
FA/273	SAE J429
FA/574	JIS B1051 Sec. 4.2.2
FA/687	ISO 6892
Hardness preparation	
FA/464	ASTM F606M
Measurement of fastener coating thickness - eddy-current method	
FA/618	JIS H8501
Measurement of fastener coating thickness - weight of coating	
FA/619	JIS H8501
Rockwell hardness of fasteners	
FA/197	ASTM E18
FA/200	ISO 6508
FA/572	JIS Z2245
FA/616	JIS B1051 Sec. 4.3
FA/617	ISO 898-1 Sec. 8.9
FB/1011	P&W E-O Supp C
Salt spray testing of fasteners	
FA/166	ASTM B117
FA/598	JIS H8502
Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)	
FA/492	ASTM E92
FA/571	JIS Z2244
FA/643	JIS B1051 Sec. 4.2.5
FA/658	ISO 6507-1
Wedge tensile strength of full-size threaded fasteners	
FA/291	ASTM F606M Sec. 3.5
FA/294	ISO 898-1 Sec. 8.5
FA/575	JIS B1051 Sec. 4.2.3
FA/685	JIS D4604 Sec. 7.7(1)
FA/688	ISO 6892

Metallography

Decarburization and case depth measurement in fasteners	
FA/324	ISO 898-1
FA/329	SAE J419
FA/645	JIS B1051
FA/656	ASTM F606M

NVLAP LAB CODE 200151-0

Cosmos Corporation
319 Akeno, Obata-cho
Watarai-gun Mie 519-0501
JAPAN
Contact: Mr. Kay Hamaguchi
Phone: 81-596-37-0190
Fax: 81-596-37-3609
E-Mail: cosmos@mint.or.jp

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200152-0

InFocus Systems, Inc.
27700B SE Parkway Avenue
Wilsonville, OR 97070-9215
Contact: Mr. Don Rhodes
Phone: 503-685-8588
Fax: 503-685-8531
E-Mail: don.rhode@infocus.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200153-0

MacLean Fasteners - QC Laboratory
1000 Allanson Road
Mundelein, IL 60060
Contact: Ms. Charlotte Kotowski
Phone: 847-566-0010 x253
Fax: 847-949-0285

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of ISO grade A and B fasteners	
FA/408	ISO 4759-1
Dimensions of ISO grade C fasteners	
FA/410	ISO 4759-1
Dimensions of fasteners - bearing surface squareness	
FA/746	ASME/ANSI B18.2.2
FA/950	ANSI/ASME B18.2.4.2M
Dimensions of fasteners - flange screw heads and flange nuts	
FA/422	ANSI/ASME B18.16.3M
FA/949	ANSI/ASME B18.2.2
Dimensions of fasteners - gaging for slotted nuts	
FA/417	ANSI/ASME B18.2.2
FA/418	ANSI/ASME B18.2.4.3M
Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets	
FA/843	ASME/ANSI B18.2.2
FA/945	ANSI B18.2.4.1M
Internal thread parameters - ISO	
FA/402	ISO 1502
FA/948	ANSI/ASME B1.16M
Internal thread parameters - system 21	
FA/942	ANSI/ASME B1.2
FA/946	ANSI/ASME B1.16M
Internal thread parameters - system 22	
FA/943	ANSI/ASME B1.2
FA/947	ANSI/ASME B1.16M
Mechanical and Physical Testing and Inspection	
Cone proof load of internally threaded fasteners (nuts)	
FA/221	ASTM F606M Sec. 4.3
FA/951	SAE J995
Hardness preparation	
FA/464	ASTM F606M
Measurement of fastener coating thickness - magnetic methods	
FA/155	ASTM E376
Prevailing torque	
FA/217	IFI-100/107
FA/218	ISO 2320
Proof load of full-size externally threaded fasteners	
FA/229	SAE J429 Sec. 5.3

FA/230	SAE J1216 Sec. 3.3
FA/467	ASTM F606M Sec. 3.2.1-3.2.3

Proof load of internally threaded fasteners (nuts)

FA/237	ASTM F606M Sec. 4.2
FA/241	SAE J995 Sec. 5.1
FA/242	SAE J1216 Sec 4.2

Rockwell hardness of fasteners

FA/197	ASTM E18
FA/200	ISO 6508
FA/202	SAE J417

Rockwell superficial hardness of fasteners

FA/205	ASTM E18
FA/208	ISO 1024
FA/210	SAE J417

Torque-tension of full-size threaded fasteners

FA/306	IFI-101
FA/308	SAE J174
FA/944	ISO 2320

Metallography

Decarburization and case depth measurement in fasteners

FA/323	ASTM E1077
FA/329	SAE J419
FA/330	SAE J423

Microscopic examination of fasteners by etching

FA/512	ASTM E407
FA/552	ASTM E3

Surface discontinuities of internally threaded fasteners

FA/364	ASTM F812M
FA/703	SAE J122

NVLAP LAB CODE 200155-0

Thomas Lighting Accent Division Photometric Laboratory

6430 East Slauson Avenue
Los Angeles, CA 90040
Contact: Mr. William Mercado
Phone: 213-726-1800 x245
Fax: 213-724-1310

Energy Efficient Lighting Products

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
	Luminaires (Lighting Fixtures)
22/F04	IES LM-41
22/F05	IES LM-46

NVLAP LAB CODE 200157-0

Seiko Epson Corporation

80 Harashinden Hirooka
Shiojiri-City Nagano 399-0785
JAPAN
Contact: Mr. Atsushi Shinozaki
Phone: 81 263-52-5094
Fax: 81 263-54-5806
E-Mail: atsushi.shinozaki@exc.epson.co.jp

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
	Australian Standards referred to by clauses in AUSTEL Technical Standards
12/T51	AS/NZS 3548
	Federal Communications Commission (FCC) Methods
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
	International Special Committee on Radio Interference (CISPR) Methods
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200158-0

San Shing Hardware Works Co., Ltd. Test Laboratory

No. 851 Chung Shan Rd. Nan-Shing Kui-Jen
Tainan
TAIWAN
Contact: Mr. Jackson Chen
Phone: 886-6-2306611 x311
Fax: 886-6-2306000

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
	Dimensional Inspection
	Dimensions of fasteners - flange screw heads and flange nuts
FA/566	IFI D21 p. D21
	Dimensions of fasteners - gaging for slotted nuts
FA/417	ANSI/ASME B18.2.2
	Internal thread parameters - ISO
FA/953	ANSI/ASME B18.2.2
	Internal thread parameters - system 21
FA/391	ANSI/ASME B1.3M
FA/942	ANSI/ASME B1.2

Internal thread parameters - system 22

FA/393 ANSI/ASME B1.3M
FA/943 ANSI/ASME B1.2

Mechanical and Physical Testing and Inspection

Clamp load test

FA/558 ISO 2320
FA/559 DIN 267, Part 15
FA/560 IFI-100/107

Cone proof load of internally threaded fasteners (nuts)

FA/220 ASTM F606 Sec. 4.3
FA/221 ASTM F606M Sec. 4.3

Measurement of fastener coating thickness - X-ray methods

FA/556 ASTM B568

Measurement of fastener coating thickness - weight of coating

FA/164 ASTM A90

Microhardness of fasteners

FA/189 ASTM E384

Prevailing torque

FA/217 IFI-100/107
FA/218 ISO 2320
FA/557 DIN 267, Part 15

Proof load of internally threaded fasteners (nuts)

FA/236 ASTM F606 Sec. 4.2
FA/237 ASTM F606M Sec. 4.2
FA/239 ISO 898-2 Sec. 8.1
FA/241 SAE J995 Sec. 5.1

Rockwell hardness of fasteners

FA/197 ASTM E18

Rockwell superficial hardness of fasteners

FA/205 ASTM E18

Salt spray testing of fasteners

FA/166 ASTM B117

Torque-tension of full-size threaded fasteners

FA/306 IFI-101

Total extension at fracture of externally threaded fasteners

FA/285 ASTM F606 Sec. 3.7
FA/286 ASTM F606M Sec. 3.7

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/492 ASTM E92

Metallography

Decarburization and case depth measurement in fasteners

FA/323 ASTM E1077
FA/561 ASTM E3
FA/562 ASTM G79

Surface discontinuities of internally threaded fasteners

FA/865 ASTM F812/F812M

NVLAP LAB CODE 200161-0

Robbins Manufacturing Co., Inc.

1200 Airport Road
P.O. Box 704/750
Fall River, MA 02722
Contact: Mr. Robert J. Laborio
Phone: 508-675-2555
Fax: 508-677-0494

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP
Code *Designation*

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/494 ANSI B18.2.1

External thread parameters - system 21

FA/379 ANSI/ASME B1.3M

External thread parameters - system 22

FA/381 ANSI/ASME B1.3M

Internal thread parameters - system 21

FA/391 ANSI/ASME B1.3M

Internal thread parameters - system 22

FA/393 ANSI/ASME B1.3M

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/266 ASTM F606 Sec. 3.4.1-3.4.3

Magnetic permeability

FA/214 ASTM A342 Test Method 3

Proof load of full-size externally threaded fasteners

FA/226 ASTM F606 Sec. 3.2.1-3.2.3

Proof load of internally threaded fasteners (nuts)

FA/236 ASTM F606 Sec. 4.2

Rockwell hardness of fasteners

FA/197 ASTM E18

Salt spray testing of fasteners

FA/166 ASTM B117

Tension testing of machined specimens from externally threaded fasteners

FA/279 ASTM F606

Total extension at fracture of externally threaded fasteners

FA/285 ASTM F606

Wedge tensile strength of full-size threaded fasteners

FA/290 ASTM F606 Sec. 3.5

Yield strength of full-size externally threaded fasteners

FA/298 ASTM F606 Sec. 3.2.4

Metallography

Decarburization and case depth measurement in fasteners

FA/483 ASTM A574 Sec. 12

Nondestructive Inspection

Liquid penetrant inspection of fasteners

FA/367	ASTM E165
FA/370	MIL-STD-271

NVLAP LAB CODE 200162-0

United States Technologies, Inc.

3505 Francis Circle
Alpharetta, GA 30201-2989
Contact: Mr. Tim Johnson
Phone: 770-740-0717
Fax: 770-740-1508
E-Mail: tjohnson.UStech@mindspring.com
URL: http://www.ustech-lab.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

Australian Standards referred to by clauses in AUSTEL Technical Standards

NVLAP Code	*Designation*
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200163-0

Ricoh Company, Ltd. Ohmori EMC Center

3-6, Naka-magome 1-Chome Ohta-ku
Tokyo 143-8555
JAPAN
Contact: Mr. Akio Niki
Phone: 81-3-3776-6281
Fax: 81-3-3777-8317
E-Mail: akio.niki@nts.ricoh.co.jp

FCC Test Methods

Accreditation Valid Through: June 30, 1999

Australian Standards referred to by clauses in AUSTEL Technical Standards

NVLAP Code	*Designation*
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200164-0

SPS Technologies; Aerospace Fastener Group

Highland Avenue
Jenkintown, PA 19046
Contact: Mr. Eric G. Hakun
Phone: 215-572-3716
Fax: 215-572-3725

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

Chemical Analysis

Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen

NVLAP Code	*Designation*
FA/625	SPS Q.C.O.I.2.5.134

Dimensional Inspection

Dimensions of fasteners - bearing surface squareness

FA/633	MIL-N-25027

Dimensions of fasteners - gaging for slotted nuts

FA/632	MIL-N-25027

Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets

FA/411	ANSI/ASME B18.3
FA/540	MIL-STD-33787
FA/634	MIL-STD-21132
FA/635	SAE AS 870

Dimensions of fasteners - straightness

FA/423	ANSI/ASME B18.2.1

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/403	ANSI/ASME B18.18.1M

Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap

FA/405	ANSI/ASME B18.18.3M
FA/406	ANSI/ASME B18.18.4M

External thread parameters - system 21

FA/379	ANSI/ASME B1.3M
FA/380	FED-STD-H28/20
FA/628	MIL-S-8879

External thread parameters - system 22

FA/381	ANSI/ASME B1.3M
FA/382	FED-STD-H28/20
FA/384	MIL-S-8879

External thread parameters - system 23

FA/385	ANSI/ASME B1.3M
FA/386	FED-STD-H28/20
FA/388	MIL-S-8879

Internal thread parameters - system 21

FA/391 ANSI/ASME B1.3M
FA/392 FED-STD-H28/20
FA/629 MIL-S-8879

Internal thread parameters - system 22

FA/393 ANSI/ASME B1.3M
FA/394 FED-STD-H28/20
FA/396 MIL-S-8879

Internal thread parameters - system 23

FA/397 ANSI/ASME B1.3M
FA/398 FED-STD-H28/20
FA/400 MIL-S-8879

Surface texture

FA/439 ANSI/ASME B46.1

Mechanical and Physical Testing and Inspection

Adhesion of metallic coatings on fasteners

FA/143 ASTM B571

Axial tensile strength of full-size threaded fasteners

FA/265 ASTM A370 Sec. A3.2.1.4
FA/266 ASTM F606 Sec. 3.4.1-3.4.3
FA/271 MIL-STD-1312-8

Charpy impact (v-notch) testing

FA/212 ASTM E23

Compression load of compressible-washer-type direct tension indicators

FA/639 SPS-J-610

Cone proof load of internally threaded fasteners (nuts)

FA/220 ASTM F606 Sec. 4.3

Copper sulfate test - test for free iron on the surface of corrosion resistant fasteners

FA/636 MIL-STD-753

Double shear of externally threaded fasteners

FA/257 MIL-STD-1312-13

Elevated temperature testing capability

FA/505 MIL-STD-1312-18
FA/546 ASTM E21
FA/627 MIL-STD1312-28

Fatigue of full-size threaded fasteners

FA/183 MIL-STD-1312-11
FA/184 NAS 1069

Flareability test of clinch and shank nuts

FA/626 SPS Q.C.O.1.2.5.134

Hardness preparation

FA/482 ASTM F606

Humidity testing of fasteners

FA/169 MIL-STD-753 Test Method 101
FA/170 QQ-P-35
FA/473 MIL-STD-1312-3

Hydrogen embrittlement (stress durability) of externally threaded fasteners

FA/176 MIL-STD-1312-5

Hydrogen embrittlement (stress durability) of internally threaded fasteners

FA/178 MIL-STD-1312-14

Intergranular corrosion susceptibility of austentic stainles steel fasteners - oxalic acid

FA/174 ASTM A262 Sec. 3-7, Practice A

Magnetic permeability

FA/214 ASTM A342 Test Method 3

Measurement of fastener coating thickness - X-ray methods

FA/556 ASTM B568

Measurement of fastener coating thickness - dimensional change method

FA/495 MIL-STD-1312-12

Measurement of fastener coating thickness - eddy-current method

FA/148 ASTM B244
FA/152 MIL-STD-1312-12

Measurement of fastener coating thickness - magnetic methods

FA/153 ASTM B499
FA/159 MIL-STD-1312-12

Measurement of fastener coating thickness - microscopical method

FA/160 ASTM B487
FA/163 MIL-STD-1312-12

Measurement of fastener coating thickness - weight of coating

FA/165 MIL-STD-1312-12

Microhardness of fasteners

FA/189 ASTM E384
FA/193 MIL-STD-1312-6

Permanent set test of self-locking nuts

FA/109 MIL-N-25027

Prevailing torque

FA/630 MIL-N-25027

Proof load of full-size externally threaded fasteners

FA/226 ASTM F606 Sec. 3.2.1-3.2.3

Proof load of internally threaded fasteners (nuts)

FA/236 ASTM F606 Sec. 4.2

Recess strength test in both the installation and removal directions

FA/476 MIL-STD-1312-25

Reusability test of self-locking internally threaded fasteners

FA/124 MIL-N-25027
FA/522 MIL-STD-1312-31

Rockwell hardness of fasteners

FA/197 ASTM E18
FA/201 MIL-STD-1312-6

Rockwell superficial hardness of fasteners

FA/205 ASTM E18
FA/209 MIL-STD-1312-6

Salt spray testing of fasteners

FA/166 ASTM B117
FA/168 MIL-STD-1312-1

Single shear of externally threaded fasteners

FA/255 ASTM F606
FA/256 MIL-STD-1312-20

Stress corrosion of fasteners

FA/172 MIL-STD-1312-9

Stress rupture of fasteners

FA/260 ASTM E139
FA/261 ASTM E292

FA/262	MIL-STD-1312-10

Tension testing of machined specimens from externally threaded fasteners

FA/278	ASTM A370
FA/279	ASTM F606 Sec. 3.6
FA/475	ASTM E8

Test for embrittlement of metallic coated externally threaded fasteners

FA/179	ASTM F606 Sec. 7
FA/525	MIL-STD-1312-5

Torque-out test

FA/133	MIL-N-25027
FA/523	MIL-STD-1312-31

Torque-tension of full-size threaded fasteners

FA/307	MIL-STD-1312-15

Vibration of full-size threaded fasteners

FA/311	MIL-STD-1312-7
FA/631	MIL-N-25027

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/492	ASTM E92

Wedge tensile strength of full-size threaded fasteners

FA/289	ASTM A370
FA/290	ASTM F606 Sec. 3.5

Wrench torque test of externally wrenched nuts of spline and hexagon and double hexagon (1

FA/141	MIL-N-25027
FA/524	MIL-STD-1312-31

Yield strength of full-size externally threaded fasteners

FA/298	ASTM F606 Sec. 3.2.4
FA/299	ASTM A370 Sec. A3.2.1.3(a)

Metallography

Decarburization and case depth measurement in fasteners

FA/323	ASTM E1077

Determination of grain size of fasteners

FA/638	ASTM E112

Macroscopic examination of fasteners by etching

FA/511	ASTM E340

Microscopic examination of fasteners by etching

FA/512	ASTM E407

Surface discontinuities of externally threaded fasteners

FA/357	ASTM F788/788M

Surface discontinuities of internally threaded fasteners

FA/363	ASTM F812

Nondestructive Inspection

Liquid penetrant inspection of fasteners

FA/371	MIL-STD-6866
FA/527	ASTM E1417

Magnetic particle inspection of fasteners

FA/485	ASTM E1444

NVLAP LAB CODE 200165-0

Metropolitan Environmental Testing Services dba METS Laboratories

179 Smallwood Village Center
Waldorf, MD 20602
Contact: Ms. Robin Grey
Phone: 301-870-1995
Fax: 301-870-1701

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200166-0

O & K Company Limited, Osaka Test Center

8-81, Nakajima 2-Chome, Nishiyodogawa-Ku
Osaka-Shi
JAPAN
Contact: Mr. Norio Shiga
Phone: 06-471-0110
Fax: 06-472-0554

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*

Chemical Analysis

Optical emission spectrochemical analysis

FA/457	ASTM E415

NVLAP LAB CODE 200167-0

Bay Area Compliance Laboratory, Corp.

230 Commercial Street, Suite 2
Sunnyvale, CA 94086
Contact: Mr. John Y. Chan
Phone: 408-732-9162
Fax: 408-732-9164

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance

(See 'How To Use This Directory' on page 7.)

characteristics of information technology equipment

NVLAP LAB CODE 200168-0

Portland Bolt and Manufacturing Company, Inc. Testing Laboratory

3441 N.W. Guam Street
P.O. Box 2866
Portland, OR 97208-2866
Contact: Mr. Dan Herboth
Phone: 503-227-5488
Fax: 503-227-4634

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code *Designation*

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners
FA/266 ASTM F606 Sec. 3.4.1-3.4.3
FA/273 SAE J429
Proof load of full-size externally threaded fasteners
FA/226 ASTM F606 Sec. 3.2.1-3.2.3
FA/229 SAE J429 Sec. 5.3
Rockwell hardness of fasteners
FA/197 ASTM E18
Rotational capacity of full-size fasteners
FA/245 ASTM A563
Tension testing of machined specimens from externally threaded fasteners
FA/279 ASTM F606 Sec. 3.6
FA/283 SAE J429
Wedge tensile strength of full-size threaded fasteners
FA/290 ASTM F606 Sec. 3.5
FA/468 SAE J429 Sec. 5.5

NVLAP LAB CODE 200169-0

Kobelco Research Institute, Inc. Stock Company

2 Nadahama-Higashimachi, Nada-ku
Kobe 657-0863
JAPAN
Contact: Mr. Morifumi Nakamura
Phone: 81-78-882-8058
Fax: 81-78-882-8211

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP Code *Designation*

Chemical Analysis

Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen
FA/586 JIS G1211
FA/587 JIS G1215
Optical emission spectrochemical analysis
FA/588 JIS G1253
Solution chemical analysis
FA/585 JIS G1258

NVLAP LAB CODE 200171-0

Leland-Powell Fasteners, Inc. Fastener Testing Laboratory

Highway 45 South
P.O. Box 260
Martin, TN 38237
Contact: Mr. Jason Danner
Phone: 901-587-3106
Fax: 901-587-9613
E-Mail: jason@lpf.net

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of fasteners - straightness
FA/754 IFI 138
Dimensions of general purpose fasteners and high-volume machine assembly fasteners
FA/404 ANSI/ASME B18.18.2M
Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap
FA/405 ANSI/ASME B18.18.3M
External thread parameters - system 22
FA/381 ANSI/ASME B1.3M

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners
FA/273 SAE J429
FA/752 SAE J82
Drive test
FA/248 SAE J81
FA/750 SAE J933
Ductility test of thread rolling and self-drilling tappings screws
FA/250 SAE J81
Hydrogen embrittlement (stress durability) of externally threaded fasteners
FA/709 SAE J81 Sec. 3.9
Measurement of fastener coating thickness - eddy-current method
FA/149 ASTM E376
Proof load of full-size externally threaded fasteners
FA/229 SAE J429 Sec. 5.3
Rockwell hardness of fasteners
FA/202 SAE J417
Rockwell superficial hardness of fasteners
FA/210 SAE J417
Torsional strength test of thread rolling and self-drilling tappings screws
FA/254 SAE J81
FA/751 SAE J933

Wedge tensile strength of full-size threaded fasteners	
FA/468	SAE J429 Sec. 5.5
FA/753	SAE J82

NVLAP LAB CODE 200172-0

Rockford Engineering Services, Inc.

2100 Calaveras Road
P.O. Box 543
Sunol, CA 94586-0543
Contact: Mr. Michael Gbadebo
Phone: 510-862-2944
Fax: 510-862-9013
E-Mail: mike@rockfordengr.com
URL: http://www.resemc.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200173-0

Fuserashi Gunma

870 Kamieda, Nitta-Cho, Nitta-Gun
Gunma-Ken 370-03
JAPAN
Contact: Mr. Takeo Okada
Phone: 06-789-7121
Fax: 06-781-1734

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of ISO grade A and B fasteners	
FA/608	JIS B1181
Dimensions of ISO grade C fasteners	
FA/609	JIS B1181
Dimensions of fasteners - flange screw heads and flange nuts	
FA/610	JIS B1190
Dimensions of general purpose fasteners and high-volume machine assembly fasteners	
FA/607	JIS B1071
External thread parameters - ISO	
FA/624	JIS B0252
Internal thread parameters - ISO	
FA/605	JIS B0251
FA/606	JIS B0252
Mechanical and Physical Testing and Inspection	
Adhesion of metallic coatings on fasteners	
FA/595	JIS H8504
CASS test (copper-accelerated acetic acid-salt spray test) of fasteners	
FA/599	JIS H8502
Measurement of fastener coating thickness - coulometric method	
FA/597	JIS H8501
Measurement of fastener coating thickness - magnetic methods	
FA/596	JIS H8501
Prevailing torque	
FA/600	JIS B1056
Proof load of full-size externally threaded fasteners	
FA/573	JIS B1051 Sec. 4.2.4
Proof load of internally threaded fasteners (nuts)	
FA/601	JIS B1052
Rockwell hardness of fasteners	
FA/572	JIS Z2245
Salt spray testing of fasteners	
FA/569	JIS Z2371
FA/598	JIS H8502

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/571 JIS Z2244

Metallography

Macroscopic examination of fasteners by etching

FA/602 JIS G0553

Surface discontinuities of externally threaded fasteners

FA/603 JIS B1043

Surface discontinuities of internally threaded fasteners

FA/604 JIS B1042

NVLAP LAB CODE 200174-0

Training Research Co., Ltd.

No. 571, 5F, Chung Shiao E. Rd., Sec. 7
P.O. Box No. 4-18, Nang Kang
Taipei
TAIWAN
Contact: Mr. Frank Tsai
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FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code *Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51 AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices

12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz

12/F01b Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22 IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200175-0

Ohtama Co., Ltd. Yamanashi EMC Test Site

1661 Oshuku Asigawa Higashi-Yatsushiro
Yamanashi
JAPAN
Contact: Mr. Etsuji Nogami
Phone: 81-552-98-2141
Fax: 81-552-98-2125

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code *Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51 AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices

12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz

12/F01b Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22 IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200177-0

Korea Testing & Research Inst. for Chemical Industry-Inchon Off.

GAJOA 3 DONG 539-8
Inchon 404-253
KOREA
Contact: Mr. Kwang-Yeon Lee
Phone: 82-32-577-6801
Fax: 82-32-575-5613

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

NVLAP Code *Designation*

Chemical Analysis

Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen

FA/455 ASTM E1019

Optical emission spectrochemical analysis

FA/457 ASTM E415

Solution chemical analysis

FA/448 ASTM E350

Dimensional Inspection

Dimensions of fasteners - straightness

FA/423 ANSI/ASME B18.2.1

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/486 MIL-STD-120 (W/ Notice dtd 9 SEP 63)

Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap

FA/493 MIL-STD-120 (W/ Notice dtd 9SEP 63)

External thread parameters - system 21

FA/379 ANSI/ASME B1.3M

External thread parameters - system 22

FA/381 ANSI/ASME B1.3M

Internal thread parameters - system 21

FA/391 ANSI/ASME B1.3M

Internal thread parameters - system 22

FA/393 ANSI/ASME B1.3M

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners
FA/266 ASTM F606 Sec. 3.4.1-3.4.3
FA/267 ASTM F606M Sec. 3.4.1-3.4.3
Brinell hardness of fasteners
FA/186 ASTM E10
Charpy impact (u-notch) testing
FA/517 ASTM E23
Charpy impact (v-notch) testing
FA/212 ASTM E23
Cone proof load of internally threaded fasteners (nuts)
FA/220 ASTM F606 Sec. 4.3
FA/221 ASTM F606M Sec. 4.3
Measurement of fastener coating thickness - X-ray methods
FA/760 ASTM A754/A754M
Measurement of fastener coating thickness - magnetic methods
FA/153 ASTM B499
Measurement of fastener coating thickness - weight of coating
FA/164 ASTM A90
Microhardness of fasteners
FA/189 ASTM E384
Proof load of full-size externally threaded fasteners
FA/226 ASTM F606 Sec. 3.2.1-3.2.3
FA/467 ASTM F606M Sec. 3.2.1-3.2.3
Proof load of internally threaded fasteners (nuts)
FA/236 ASTM F606 Sec. 4.2
FA/237 ASTM F606M Sec. 4.2
Rockwell hardness of fasteners
FA/197 ASTM E18
Salt spray testing of fasteners
FA/166 ASTM B117
Tension testing of machined specimens from externally threaded fasteners
FA/279 ASTM F606 Sec. 3.6
FA/280 ASTM F606M Sec. 3.6
Wedge tensile strength of full-size threaded fasteners
FA/290 ASTM F606 Sec. 3.5
FA/291 ASTM F606M Sec. 3.5
Yield strength of full-size externally threaded fasteners
FA/298 ASTM F606 Sec. 3.2.4
FA/300 ASTM F606M Sec. 3.2.4

Metallography

Decarburization and case depth measurement in fasteners
FA/323 ASTM E1077
Determination of grain size of fasteners
FA/638 ASTM E112
Macroscopic examination of fasteners by etching
FA/511 ASTM E340
Microscopic examination of fasteners by etching
FA/512 ASTM E407
Surface discontinuities of externally threaded fasteners
FA/357 ASTM F788/788M
Surface discontinuities of internally threaded fasteners
FA/865 ASTM F812/F812M

NVLAP LAB CODE 200178-0

Durkee Testing Laboratories, Inc.

15700 Texaco Street
P.O. Box 1401
Paramount, CA 90723-1401
Contact: Mr. John A. Durkee
Phone: 562-531-7111
Fax: 562-531-7137
E-Mail: durkee@IBM.net

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code *Designation*

Chemical Analysis

Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen
FA/455 ASTM E1019
FA/472 ASTM E1447
FA/513 ASTM E1409
FA/514 ASTM E351 Sec. 37
FA/515 ASTM E352 Sec. 36
FA/516 ASTM E353 Sec. 37
Energy dispersive X-ray analysis
FA/500 ASTM E1508
Optical emission spectrochemical analysis
FA/457 ASTM E415
FA/458 ASTM E607
FA/459 ASTM E1086
Spot test analysis
FA/501 ASTM STP550

Mechanical and Physical Testing and Inspection

Adhesion of metallic coatings on fasteners
FA/143 ASTM B571
Axial tensile strength of full-size threaded fasteners
FA/271 MIL-STD-1312-8
Bend test of full size eyebolts
FA/503 ASTM A370 Sec. 14
Breaking strength of fullsize eyebolts
FA/508 MIL-STD-1312-8
Brinell hardness of fasteners
FA/186 ASTM E10
CASS test (copper-accelerated acetic acid-salt spray test) of fasteners
FA/496 ASTM B368
Charpy impact (u-notch) testing
FA/517 ASTM E23
Charpy impact (v-notch) testing
FA/211 ASTM A370 Sec. 19-28
FA/212 ASTM E23
Copper sulfate test - test for free iron on the surface of corrosion resistant fasteners
FA/499 ASTM A380

Double shear of externally threaded fasteners

FA/257 MIL-STD-1312-13

Elevated temperature testing capability

FA/505 MIL-STD-1312-18

Fatigue of full-size threaded fasteners

FA/183 MIL-STD-1312-11

Humidity testing of fasteners

FA/473 MIL-STD-1312-3

Hydrogen embrittlement (stress durability) of externally threaded fasteners

FA/176 MIL-STD-1312-5

Hydrogen embrittlement (stress durability) of internally threaded fasteners

FA/178 MIL-STD-1312-14

Intergranular corrosion susceptibility in austentic stainless steel fasteners - nitric aci

FA/173 ASTM A262 Sec. 15-21, Practice C
FA/504 ASTM G28

Intergranular corrosion susceptibility of austentic stainles steel fasteners - oxalic acid

FA/174 ASTM A262 Sec. 3-7, Practice A

Lock torque tests

FA/480 MIL-STD-1312-31

Measurement of fastener coating thickness - dimensional change method

FA/495 MIL-STD-1312-12

Measurement of fastener coating thickness - magnetic methods

FA/159 MIL-STD-1312-12

Measurement of fastener coating thickness - microscopical method

FA/163 MIL-STD-1312-12

Measurement of fastener coating thickness - weight of coating

FA/165 MIL-STD-1312-12

Microhardness of fasteners

FA/193 MIL-STD-1312-6

Proof load of full-size externally threaded fasteners

FA/226 ASTM F606 Sec. 3.2.1-3.2.3

Proof load of full-size eyebolts

FA/232 ASTM F541

Proof load of internally threaded fasteners (nuts)

FA/236 ASTM F606 Sec. 4.2

Push out test of floating plate nuts, gang channel nuts, and anchor nuts

FA/116 MIL-N-25027

Recess strength test in both the installation and removal directions

FA/476 MIL-STD-1312-25

Rockwell hardness of fasteners

FA/201 MIL-STD-1312-6

Rockwell superficial hardness of fasteners

FA/209 MIL-STD-1312-6

Salt spray testing of fasteners

FA/166 ASTM B117
FA/168 MIL-STD-1312-1

Single shear of externally threaded fasteners

FA/256 MIL-STD-1312-20

Stress corrosion of fasteners

FA/172 MIL-STD-1312-9

Stress rupture of fasteners

FA/262 MIL-STD-1312-10

Test for embrittlement of metallic coated externally threaded fasteners

FA/506 ASTM F519

Torque-out test

FA/133 MIL-N-25027
FA/502 MIL-N-45913

Vibration of full-size threaded fasteners

FA/311 MIL-STD-1312-7

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/507 ASTM E384

Water immersion method - test for anodic surface containment on corrosion resistant fasten

FA/497 ASTM A262
FA/498 ASTM G31

Wedge tensile strength of full-size threaded fasteners

FA/290 ASTM F606 Sec. 3.5
FA/510 ASTM E8

Yield strength of full-size externally threaded fasteners

FA/593 ASTM E8

Metallography

Decarburization and case depth measurement in fasteners

FA/483 ASTM A574 Sec. 12
FA/520 ASTM F835

Determination of grain size of fasteners

FA/331 ASTM E112

Macroscopic examination of fasteners by etching

FA/511 ASTM E340

Microscopic examination of fasteners by etching

FA/512 ASTM E407

Surface discontinuities of externally threaded fasteners

FA/357 ASTM F788

Surface discontinuities of internally threaded fasteners

FA/363 ASTM F812

NVLAP LAB CODE 200179-0

Fastener Innovation Technology, Inc.
13215 S. Western Avenue
Gardena, CA 90249-9123
Contact: Mr. Jorge W. Molina
Phone: 310-538-1111
Fax: 310-324-7602
E-Mail: JWM@fitfastener.com

Fasteners & Metals
Accreditation Valid Through: June 30, 1999

NVLAP
Code *Designation*

Dimensional Inspection

Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets
FA/411 ANSI/ASME B18.3
External thread parameters - ISO
FA/594 FED-STD-H28/21
External thread parameters - system 21
FA/380 FED-STD-H28/20
External thread parameters - system 22
FA/382 FED-STD-H28/20
External thread parameters - system 23
FA/386 FED-STD-H28/20
Surface texture
FA/439 ANSI/ASME B46.1

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners
FA/271 MIL-STD-1312-8
FA/530 ASTM E8
Copper sulfate test - test for free iron on the surface of corrosion resistant fasteners
FA/499 ASTM A380
Double shear of externally threaded fasteners
FA/257 MIL-STD-1312-13
Elevated temperature testing capability
FA/505 MIL-STD-1312-18
Fatigue of full-size threaded fasteners
FA/183 MIL-STD-1312-11
Hydrogen embrittlement (stress durability) of externally threaded fasteners
FA/176 MIL-STD-1312-5
Magnetic permeability
FA/215 MIL-I-17214
Measurement of fastener coating thickness - microscopical method
FA/591 ASTM E1182
Microhardness of fasteners
FA/189 ASTM E384
FA/193 MIL-STD-1312-6
Proof load of full-size externally threaded fasteners
FA/226 ASTM F606 Sec. 3.2.1-3.2.3
Recess strength test in both the installation and removal directions
FA/476 MIL-STD-1312-25
Reusability test of self-locking internally threaded fasteners
FA/124 MIL-N-25027
Rockwell hardness of fasteners
FA/201 MIL-STD-1312-6
Rockwell superficial hardness of fasteners
FA/209 MIL-STD-1312-6
Salt spray testing of fasteners
FA/166 ASTM B117
Single shear of externally threaded fasteners
FA/256 MIL-STD-1312-20
Stress corrosion of fasteners
FA/172 MIL-STD-1312-9
Stress rupture of fasteners
FA/262 MIL-STD-1312-10
Tension testing of machined specimens from externally threaded fasteners
FA/475 ASTM E8
FA/526 MIL-STD-1312-8
Total extension at fracture of externally threaded fasteners
FA/592 ASTM E8
Wedge tensile strength of full-size threaded fasteners
FA/289 ASTM A370
FA/290 ASTM F606 Sec. 3.5
Wrench torque test of externally wrenched nuts of spline and hexagon and double hexagon (1
FA/141 MIL-N-25027
Yield strength of full-size externally threaded fasteners
FA/593 ASTM E8

Metallography

Decarburization and case depth measurement in fasteners
FA/323 ASTM E1077
Determination of grain size of fasteners
FA/331 ASTM E112
Macroscopic examination of fasteners by etching
FA/511 ASTM E340
Microscopic examination of fasteners by etching
FA/512 ASTM E407
Surface discontinuities of externally threaded fasteners
FA/357 ASTM F788/788M

Nondestructive Inspection

Liquid penetrant inspection of fasteners
FA/371 MIL-STD-6866
FA/527 ASTM E1417
Magnetic particle inspection of fasteners
FA/485 ASTM E1444

NVLAP LAB CODE 200180-0

Fuji Component Parts USA, Inc.

4115 West 54th Street
Indianapolis, IN 46254
Contact: Mr. Steve Egelhoff
Phone: 317-347-4115
Fax: 317-347-4123

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code *Designation*

Chemical Analysis

Optical emission spectrochemical analysis
FA/457 ASTM E415

Dimensional Inspection

External thread parameters - system 21
FA/379 ANSI/ASME B1.3M

Internal thread parameters - system 21

FA/391 ANSI/ASME B1.3M

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/266 ASTM F606 Sec. 3.4.1-3.4.3

Measurement of fastener coating thickness - coulometric method

FA/567 ASTM B504

Microhardness of fasteners

FA/657 ASTM E92

Proof load of full-size externally threaded fasteners

FA/226 ASTM F606 Sec. 3.2.1-3.2.3

Proof load of internally threaded fasteners (nuts)

FA/236 ASTM F606 Sec. 4.2

Rockwell hardness of fasteners

FA/197 ASTM E18

Salt spray testing of fasteners

FA/166 ASTM B117

Wedge tensile strength of full-size threaded fasteners

FA/290 ASTM F606 Sec. 3.5

Yield strength of full-size externally threaded fasteners

FA/298 ASTM F606 Sec. 3.2.4

NVLAP LAB CODE 200181-0

Topura Co., Ltd.

201 Soya
Hadano Kanagawa 257-8686
JAPAN
Contact: Mr. Katsuzo Fujihira
Phone: 0463-82-4179
Fax: 0463-82-6169

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP
Code *Designation*

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/607 JIS B1071
FA/675 JIS B1012
FA/682 JASO F116

External thread parameters - ISO

FA/676 JIS B1071

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/574 JIS B1051 Sec. 4.2.2
FA/672 JIS B1054

Embrittlement test of washers

FA/673 JIS B1252

Head soundness testing

FA/615 JIS B1051 Sec. 4.2.6

Measurement of fastener coating thickness - eddy-current method

FA/618 JIS H8501

Measurement of fastener coating thickness - weight of coating

FA/619 JIS H8501

Microhardness of fasteners

FA/620 JIS Z2244

Proof load of full-size externally threaded fasteners

FA/573 JIS B1051 Sec. 4.2.4

Recovery test of washers

FA/674 JIS B1252
FA/677 JIS B1251

Rockwell hardness of fasteners

FA/707 JIS B1051 Sec. 4.2.5

Salt spray testing of fasteners

FA/569 JIS Z2371
FA/598 JIS H8502

Twist test of lock washers

FA/678 JIS B1251

Wedge tensile strength of full-size threaded fasteners

FA/575 JIS B1051 Sec. 4.2.3

Metallography

Decarburization and case depth measurement in fasteners

FA/645 JIS B1051

Surface discontinuities of externally threaded fasteners

FA/603 JIS B1043
FA/646 JIS B1041

NVLAP LAB CODE 200183-0

California Screw Products

14957 Gwenchris Court
Paramount, CA 90723-3423
Contact: Mr. Ralph Terrazas
Phone: 562-633-6626
Fax: 562-633-2082

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP
Code *Designation*

Dimensional Inspection

Dimensions of fasteners - straightness

FA/423 ANSI/ASME B18.2.1

External thread parameters - SAE fastener with MJ metric screw threads

FA/922 ANSI/ASME B1.3M

External thread parameters - system 22

FA/381 ANSI/ASME B1.3M

External thread parameters - system 23

FA/385 ANSI/ASME B1.3M

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/799 NASM 1312-8

Double shear of externally threaded fasteners

FA/880 NASM 1312-13

Fatigue of full-size threaded fasteners
FA/876 NASM 1312-11

Hydrogen embrittlement (stress durability) of externally threaded fasteners
FA/875 NASM 1312-5

Magnetic permeability
FA/214 ASTM A342 Test Method 3

Measurement of fastener coating thickness - dimensional change method
FA/874 NASM 1312-12

Measurement of fastener coating thickness - eddy-current method
FA/872 NASM 1312-12

Measurement of fastener coating thickness - microscopical method
FA/873 NASM 1312-12

Microhardness of fasteners
FA/877 NASM 1312-6

Recess strength test in both the installation and removal directions
FA/886 NASM 1312-25

Rockwell hardness of fasteners
FA/878 NASM 1312-6

Single shear of externally threaded fasteners
FA/879 NASM 1312-20

Stress rupture of fasteners
FA/881 NASM 1312-10

Metallography

Decarburization and case depth measurement in fasteners
FA/328 SAE J121

Determination of grain size of fasteners
FA/331 ASTM E112

Macroscopic examination of fasteners by etching
FA/511 ASTM E340

Microscopic examination of fasteners by etching
FA/512 ASTM E407

Surface discontinuities of externally threaded fasteners
FA/357 ASTM F788/788M

NVLAP LAB CODE 200184-0

NSS Technologies
9075 General Drive
Plymouth, MI 48170-4623
Contact: Mr. Darrin Keener
Phone: 313-416-5721
Fax: 313-453-0690

Fasteners & Metals
Accreditation Valid Through: December 31, 1999
NVLAP Code *Designation*

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners
FB/1083 NSS TIM-0006
FB/1084 NSS TIM-0007
FB/1085 NSS TIM-0008
FB/1086 NSS TIM-0009

External thread parameters - system 21
FA/379 ANSI/ASME B1.3M
FB/1079 NSS TIM-0010

External thread parameters - system 22
FA/381 ANSI/ASME B1.3M
FB/1080 NSS TIM-0010

Internal thread parameters - system 21
FA/391 ANSI/ASME B1.3M
FB/1081 NSS TIM-0010

Internal thread parameters - system 22
FA/393 ANSI/ASME B1.3M
FB/1082 NSS TIM-0010

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners
FA/266 ASTM F606 Sec. 3.4.1-3.4.3
FA/267 ASTM F606M Sec. 3.4.1-3.4.3
FA/273 SAE J429
FA/578 SAE J1216 Sec. 3.5
FB/1089 SAE J995

Proof load of full-size externally threaded fasteners
FA/226 ASTM F606 Sec. 3.2.1-3.2.3
FA/229 SAE J429
FA/467 ASTM F606M Sec. 3.2.1-3.2.3
FA/577 SAE J1216 Sec. 3.3
FB/1087 ANSI/AWWA C111/A21.11

Proof load of internally threaded fasteners (nuts)
FA/236 ASTM F606 Sec. 4.2
FA/237 ASTM F606M Sec. 4.2
FA/241 SAE J995 Sec. 5.1
FB/1088 ANSI/AWWA C111/A21.11

Rockwell hardness of fasteners
FA/197 ASTM E18

Metallography

Surface discontinuities of externally threaded fasteners
FA/357 ASTM F788/788M
FA/361 SAE J123
FB/1090 Chrysler PF-5188

Surface discontinuities of internally threaded fasteners
FA/703 SAE J122
FA/865 ASTM F812/F812M
FB/1091 Chrysler PF-5189

Nondestructive Inspection

Magnetic particle inspection of fasteners
FA/374 ASTM E709
FA/485 ASTM E1444

NVLAP LAB CODE 200185-0

Acominas - Analysis and Testing Laboratory

Rodovia MG, 443 - km 05
Ouro Branco MG 36420.000
BRAZIL
Contact: Mr. Dalvio Correia Mourao
Phone: 55-31-749-3334
Fax: 55-31-749-3302
E-Mail: dalvio@acominas.com.br

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

Chemical Analysis

NVLAP Code	*Designation*
Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen	
FA/455	ASTM E1019
Optical emission spectrochemical analysis	
FA/457	ASTM E415
Solution chemical analysis	
FA/448	ASTM E350
X-ray fluorescence (XRF) spectrochemical analysis	
FA/463	ASTM E1085

NVLAP LAB CODE 200186-0

Hitachi Information Technology Co., Ltd. Nakai Test Site

Nakai Test Site
456 Sakai, Nakai-machi, Ashigarakami-gun
Kanagawa 259-0157
JAPAN
Contact: Mr. Seiichi Kawashima
Phone: 81-463-88-1311
Fax: 81-463-87-1723

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200187-0

Arden Fasteners

901 South Rohlwing Road, Unit J
Addison, IL 60101-4241
Contact: Mr. Michael J. Stevens
Phone: 612-482-7445
Fax: 612-483-1470
E-Mail: mikes@arden-fas.com

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

Dimensional Inspection

NVLAP Code	*Designation*
Dimensions of fasteners - flange screw heads and flange nuts	
FA/566	IFI D21 p. D21
FA/712	IFI 111
Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets	
FA/718	IFI 115
FA/719	ANSI/ASME B1.1
Dimensions of general purpose fasteners and high-volume machine assembly fasteners	
FA/403	ANSI/ASME B18.18.1M
FA/404	ANSI/ASME B18.18.2M

Mechanical and Physical Testing and Inspection

NVLAP Code	*Designation*
Axial tensile strength of full-size threaded fasteners	
FA/266	ASTM F606 Sec. 3.4.1-3.4.3
Drill-drive test	
FA/710	SAE J78
FA/711	SAE J81
Drive test	
FA/717	ANSI/ASME B18.6.4
Ductility test of thread rolling and self-drilling tappings screws	
FA/249	SAE J78
FA/250	SAE J81
Hardness preparation	
FA/482	ASTM F606
Hydrogen embrittlement (stress durability) of externally threaded fasteners	
FA/708	FIP 1000.6 Fastener Inspection Products
FA/709	SAE J81 Sec. 3.9
Measurement of fastener coating thickness - magnetic methods	
FA/153	ASTM B499
Microhardness of fasteners	
FA/189	ASTM E384
Prevailing torque	
FA/217	IFI-100/107
Rockwell hardness of fasteners	
FA/197	ASTM E18
Salt spray testing of fasteners	
FA/166	ASTM B117

Test for embrittlement of metallic coated externally threaded fasteners

FA/715	SAE J81
FA/716	FIP 1000.6

Torsional strength test of thread rolling and self-drilling tappings screws

FA/253	SAE J78
FA/254	SAE J81

Twist test of lock washers

FA/321	ASME B18.21.1

Wedge tensile strength of full-size threaded fasteners

FA/290	ASTM F606 Sec. 3.5

Metallography

Decarburization and case depth measurement in fasteners

FA/327	SAE J78

NVLAP LAB CODE 200188-0

EMSL Analytical, Inc.

6330 East 75th Street, Suite 152
Indianapolis, IN 46250
Contact: Mr. Richard Harding
Phone: 317-570-5892
Fax: 317-570-5894

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: March 31, 1999

Airborne Asbestos Analysis (TEM)

Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 200189-0

Japan Quality Assurance Organization Safety Testing Center

1-21-25, Kinuta, Setagaya-ku
Tokyo 157-8573
JAPAN
Contact: Mr. Tateo Kashiwagi
Phone: 81-3-3416-0193
Fax: 81-3-3416-8290
E-Mail: JQA00091@nifty.ne.jp
URL: http://www/jqq.or.jp

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200190-0

Japan Quality Assurance Org. Chubu Testing Center Shikatsu Branch

53-1, Yamaura, Yakushiji, Shikatsu-cho
Nishikasugai-gun
Aichi 481-005
JAPAN
Contact: Mr. Yasuhiko Kawakami
Phone: 81-568-23-0023
Fax: 81-568-23-0116

URL: http://www.jqa.or.jp

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200191-0

Japan Quality Assurance Organization Kita-Kansai Testing Center

7-7, Ishimaru 1-chome, Minoo-shi
Osaka 562-0027
JAPAN
Contact: Mr. Fumio Matsuda
Phone: 81-0727-29-2243
Fax: 81-0727-28-6848
E-Mail: JQA00127@nifty.ne.jp

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548

(See 'How To Use This Directory' on page 7.)

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200192-0

Japan Quality Assurance Org. Safety Testing Ctr. Tsuru EMC Branch

2096, Ohata Tanbozawa, Tsuru-shi
Yamanashi 402-0045
JAPAN
Contact: Mr. Tateo Kahiwagi
Phone: 81-3-3416-0193
Fax: 81-3-3416-8290
E-Mail: JQA00091@nifty.ne.jp
URL: http://www.jqa.or.jp

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200194-0

TWN Fastener, Inc.

1070 Monterey Court
Bowling Green, KY 42101
Contact: Mr. Kazuma Sunagawa
Phone: 502-781-8500
Fax: 502-781-3150

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/607	JIS B1071

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/266	ASTM F606 Sec. 3.4.1-3.4.3
FA/574	JIS B1051 Sec. 4.2.2

Hardness preparation

FA/482	ASTM F606

Measurement of fastener coating thickness - magnetic methods

FA/155	ASTM E376
FA/596	JIS H8501

Measurement of fastener coating thickness - weight of coating

FA/619	JIS H8501

Microhardness of fasteners

FA/642	JIS B1051 Sec. 4.2.5

Proof load of full-size externally threaded fasteners

FA/226	ASTM F606 Sec. 3.2.1-3.2.3
FA/573	JIS B1051 Sec. 4.2.4

Rockwell hardness of fasteners

FA/616	JIS B1051 Sec. 4.3

Salt spray testing of fasteners

FA/166	ASTM B117

Wedge tensile strength of full-size threaded fasteners

FA/290	ASTM F606 Sec. 3.5
FA/575	JIS B1051 Sec. 4.2.3

Metallography

Decarburization and case depth measurement in fasteners

FA/645	JIS B1051

Surface discontinuities of externally threaded fasteners

FA/357	ASTM F788/788M

NVLAP LAB CODE 200195-0

Republic Fastener Manufacturing

1300 Rancho Conejo Blvd.
Newbury Park, CA 91320-1405
Contact: Mr. Dirk Deem
Phone: 805-498-6621
Fax: 805-498-4250

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*

Dimensional Inspection

Dimensions of fasteners - bearing surface squareness

FA/633	MIL-N-25027
FA/911	BPS-N-70
FA/912	NAS 3350
FA/913	MIL-N-7873

FA/914 AMS 7251
FA/921 Northrop 33A056

Internal thread parameters - system 21

FA/629 MIL-S-8879

Internal thread parameters - system 22

FA/396 MIL-S-8879

Surface texture

FA/439 ANSI/ASME B46.1

Mechanical and Physical Testing and Inspection

Adhesion of metallic coatings on fasteners

FA/541 QQ-P-416 Sec. 4.6.2
FA/916 BPS-N-70

Axial tensile strength of full-size threaded fasteners

FA/271 MIL-STD-1312-8

Elevated temperature testing capability

FA/895 BPS-N-70
FA/896 MIL-N-25027
FA/897 NAS 3350

Hydrogen embrittlement (stress durability) of internally threaded fasteners

FA/178 MIL-STD-1312-14

Magnetic permeability

FA/214 ASTM A342 Test Method 3

Measurement of fastener coating thickness - beta backscatter method

FA/889 ASTM B567

Measurement of fastener coating thickness - microscopical method

FA/160 ASTM B487
FA/163 MIL-STD-1312-12

Microhardness of fasteners

FA/193 MIL-STD-1312-6
FA/898 NAS 3350

Permanent set test of self-locking nuts

FA/109 MIL-N-25027
FA/110 NAS 3350
FA/890 MIL-N-7873

Prevailing torque

FA/630 MIL-N-25027
FA/899 BPS-N-70
FA/900 AMS 7251
FA/901 MIL-N-7873
FA/902 NAS 3350
FA/920 Northrop 33A056

Proof load of internally threaded fasteners (nuts)

FA/903 NAS 3350
FA/917 BPS-N-70
FA/918 MIL-N-25027

Push out test of floating plate nuts, gang channel nuts, and anchor nuts

FA/116 MIL-N-25027
FA/891 BPS-N-70

Reusability test of self-locking internally threaded fasteners

FA/123 MIL-N-7873
FA/124 MIL-N-25027
FA/125 NAS 3350
FA/774 BPS-N-70
FA/892 AMS 7251
FA/919 Northrop 33A056

Rockwell superficial hardness of fasteners

FA/205 ASTM E18
FA/209 MIL-STD-1312-6

Room temperature of three cycles test of floating plate nuts, gang channel nuts and anchor

FA/915 AMS 7251

Salt spray testing of fasteners

FA/166 ASTM B117
FA/168 MIL-STD-1312-1

Torque-out test

FA/523 MIL-STD-1312-31

Water immersion method - test for anodic surface containment on corrosion resistant fasten

FA/756 MIL-STD-753 Test 100

Wrench torque test of externally wrenched nuts of spline and hexagon and double hexagon (1

FA/141 MIL-N-25027
FA/142 NAS 3350
FA/893 BPS-N-70
FA/894 AMS 7251

Metallography

Decarburization and case depth measurement in fasteners

FA/904 BPS-N-70
FA/908 NAS 3350

Determination of grain size of fasteners

FA/905 BPS-N-70
FA/909 NAS 3350

Microscopic examination of fasteners by etching

FA/906 BPS-N-70
FA/910 NAS 3350

Surface discontinuities of internally threaded fasteners

FA/907 BPS-N-70

Nondestructive Inspection

Liquid penetrant inspection of fasteners

FA/527 ASTM E1417

Magnetic particle inspection of fasteners

FA/485 ASTM E1444

NVLAP LAB CODE 200196-0

Belgo-Mineira Chemical Laboratory

Av. Getulio Vargas, No 100
35.930-900 Joao Monlevade, M.G.
BRAZIL
Contact: Mr. Alexandre de Azevedo Caixeta
Phone: 055-31-859-1477
Fax: 055-31-859-1545
E-Mail: caixetqa@bms.com.br

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP
Code *Designation*

Chemical Analysis

Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen

FA/455 ASTM E1019
FA/563 ASTM E1806

Optical emission spectrochemical analysis

FA/457 ASTM E415
FA/555 ASTM E1009
FA/564 ASTM E1806

X-ray fluorescence (XRF) spectrochemical analysis

FA/461 ASTM E322
FA/565 ASTM E1806

NVLAP LAB CODE 200197-0

Asakawa Screw Co., Ltd.
1261 Nippa-cho, Kohoku-ku
Yokohama 223
JAPAN
Contact: Mr. Tatsuhiko Asakawa
Phone: 045-531-1292
Fax: 045-543-1500

Fasteners & Metals
Accreditation Valid Through: December 31, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of fasteners - bearing surface squareness

FA/649 JIS B1071

Dimensions of fasteners - flange screw heads and flange nuts

FA/610 JIS B1190

Dimensions of fasteners - gaging for slotted nuts

FA/698 JIS B1170

Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets

FA/697 JIS B1180

Dimensions of fasteners - straightness

FA/648 JIS B1071

Surface texture

FA/650 JIS B1071

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/574 JIS B1051 Sec. 4.2.2

Embrittlement test of washers

FA/673 JIS B1252

Microhardness of fasteners

FA/620 JIS Z2244

Proof load of full-size externally threaded fasteners

FA/573 JIS B1051 Sec. 4.2.4

Proof load of internally threaded fasteners (nuts)

FA/601 JIS B1052

Rockwell hardness of fasteners

FA/572 JIS Z2245

Rockwell superficial hardness of fasteners

FA/699 JIS Z2245

Torque-tension of full-size threaded fasteners

FA/308 SAE J174

Twist test of lock washers

FA/678 JIS B1251

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/571 JIS Z2244

Wedge tensile strength of full-size threaded fasteners

FA/575 JIS B1051 Sec. 4.2.3

Yield strength of full-size externally threaded fasteners

FA/686 JIS B1051 Sec. 4.2.2

Metallography

Decarburization and case depth measurement in fasteners

FA/645 JIS B1051

Determination of grain size of fasteners

FA/700 JIS G0551

Microscopic examination of fasteners by etching

FA/512 ASTM E407

Surface discontinuities of externally threaded fasteners

FA/361 SAE J123

Surface discontinuities of internally threaded fasteners

FA/365 SAE J122

Nondestructive Inspection

Magnetic particle inspection of fasteners

FA/701 JIS G0565

NVLAP LAB CODE 200198-0

IBM Yamato EMC Engineering
1623-14, Shimotsuruma
Yamato Kanagawa 242
JAPAN
Contact: Mr. Akihisa Sakurai
Phone: 81-462-73-2613
Fax: 81-462-73-7420
E-Mail: akihisa@jp.ibm.com

FCC Test Methods
Accreditation Valid Through: June 30, 1999

NVLAP Code *Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51 AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22 IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200199-0

NAWCWPNS EMI Lab, China Lake/Pt. Mugu, CA

Commander, NAWCWPNS Division
1 Administration Circle, Code 473140D
China Lake, CA 93555-6001
Contact: Mr. S. N. Tanner
Phone: 760-939-4669
Fax: 760-939-1065
E-Mail: steve_tanner@imdgw.chinalake.navy.mil

MIL-STD-462 Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A01	MIL-STD-462 Method CE01
12/A04	MIL-STD-462 Method CE02
12/A06	MIL-STD-462 Method CE03
12/A08	MIL-STD-462 Method CE04
12/A10	MIL-STD-462 Method CE06
12/A12	MIL-STD-462 Method CE07
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B05	MIL-STD-462 Method CS06
Radiated Emissions:	
12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
Radiated Susceptibility:	
12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E03	MIL-STD-462 Method RS03 (Consult laboratory for field strengths available)
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)
12/E05	MIL-STD-462 Method RS05

NVLAP LAB CODE 200200-0

IBM RTP PSG EMC Test Labs

3039 Cornwallis Road
Research Triangle Park, NC 27709-2195
Contact: Mr. Jairo Pacheco
Phone: 919-543-3686
Fax: 919-254-7778

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200201-0

Intertek Testing Services

1365 Adams Court
Menlo Park, CA 94025
Contact: Mr. C. K. Li
Phone: 650-463-2922
Fax: 650-463-2910
E-Mail: ckli@itsqs.com
URL: http://www.worldlab.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200202-0

NOVA Machine Products

18001 Sheldon Road
Middleburg Heights, OH 44130-2471
Contact: Mr. David Nenstiel
Phone: 216-267-3200
Fax: 216-267-8515
E-Mail: dnenstiel@nova-nsa.com
URL: http://www.lab@nova-nsa.com

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

NVLAP
Code *Designation*

Chemical Analysis

Optical emission spectrochemical analysis

FA/457	ASTM E415
FA/459	ASTM E1086

Spot test analysis

FA/748	Alloy Detector Mark II

Dimensional Inspection

Dimensions of ISO grade A and B fasteners

FA/738	ISO 4014
FA/739	ISO 4017
FA/740	ISO 4032

Dimensions of ISO grade C fasteners

FA/741	ISO 4016
FA/742	ISO 4018
FA/743	ISO 4034

Dimensions of fasteners - bearing surface squareness

FA/745	ANSI B18.2.1
FA/746	ASME/ANSI B18.2.2
FA/747	ASME/ANSI B18.3

Dimensions of fasteners - flange screw heads and flange nuts

FA/744	ANSI B18.2.1

Dimensions of fasteners - gaging for slotted nuts

FA/417	ANSI/ASME B18.2.2

Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets

FA/411	ANSI/ASME B18.3

Dimensions of fasteners - straightness

FA/423	ANSI/ASME B18.2.1

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/403	ANSI/ASME B18.18.1M
FA/404	ANSI/ASME B18.18.2M

Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap

FA/405	ANSI/ASME B18.18.3M
FA/406	ANSI/ASME B18.18.4M

External thread parameters - ISO

FA/728	ISO 68
FA/729	ISO 261
FA/730	ISO 262
FA/731	ISO 965-1
FA/732	ISO 965-2

External thread parameters - system 21

FA/379	ANSI/ASME B1.3M

External thread parameters - system 22

FA/381	ANSI/ASME B1.3M

External thread parameters - system 23

FA/385	ANSI/ASME B1.3M

Internal thread parameters - ISO

FA/733	ISO 68
FA/734	ISO 261
FA/735	ISO 262
FA/736	ISO 965-1
FA/737	ISO 965-2

Internal thread parameters - system 21

FA/391	ANSI/ASME B1.3M

Internal thread parameters - system 22

FA/393	ANSI/ASME B1.3M

Internal thread parameters - system 23

FA/397	ANSI/ASME B1.3M

Surface texture

FA/439	ANSI/ASME B46.1

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/265	ASTM A370 Sec. A3.2.1.4
FA/266	ASTM F606 Sec. 3.4.1-3.4.3
FA/273	SAE J429
FA/274	SAE J1216
FA/687	ISO 6892

Compression load of compressible-washer-type direct tension indicators

FA/312	ASTM F959

Cone proof load of internally threaded fasteners (nuts)

FA/220	ASTM F606 Sec. 4.3

Embrittlement test of washers

FA/313	ASME B18.21.1

Hardness preparation

FA/482	ASTM F606

Hydrogen embrittlement (stress durability) of externally threaded fasteners

FA/176	MIL-STD-1312-5

Hydrogen embrittlement (stress durability) of internally threaded fasteners

FA/178	MIL-STD-1312-14

Proof load of full-size externally threaded fasteners

FA/225	ASTM A370 Sec. A3.2.1.1-A3.2.1.3
FA/226	ASTM F606 Sec. 3.2.1-3.2.3
FA/229	SAE J429 Sec. 5.3
FA/230	SAE J1216 Sec. 3.3

Proof load of internally threaded fasteners (nuts)

FA/235	ASTM A370 Sec. A3.5.1
FA/236	ASTM F606 Sec. 4.2
FA/241	SAE J995 Sec. 5.1

Recovery test of washers

FA/726	ASME/ANSI B18.21.1

Rockwell hardness of fasteners

FA/196	ASTM A370 Sec. 18
FA/197	ASTM E18
FA/200	ISO 6508
FA/202	SAE J417

Rockwell superficial hardness of fasteners

FA/205	ASTM E18
FA/206	ASTM A370 Sec. 18
FA/210	SAE J417

Temper test of lock washers

FA/319	ASME B18.21.1

Tension testing of machined specimens from externally threaded fasteners

FA/278	ASTM A370
FA/279	ASTM F606 Sec. 3.6
FA/283	SAE J429
FA/475	ASTM E8
FA/580	ISO 6892

Test for embrittlement of metallic coated externally threaded fasteners

FA/179 ASTM F606 Sec. 7
FA/724 ASTM A143

Torque-tension of full-size threaded fasteners

FA/307 MIL-STD-1312-15

Total extension at fracture of externally threaded fasteners

FA/285 ASTM F606 Sec. 3.7
FA/725 ISO 6892

Twist test of lock washers

FA/321 ASME B18.21.1

Wedge tensile strength of full-size threaded fasteners

FA/289 ASTM A370
FA/290 ASTM F606 Sec. 3.5
FA/468 SAE J429 Sec. 5.5
FA/469 SAE J1216 Sec. 3.6
FA/688 ISO 6892

Metallography

Surface discontinuities of externally threaded fasteners

FA/357 ASTM F788/788M
FA/359 ISO 6157-1
FA/360 ISO 6157-3
FA/361 SAE J123

Surface discontinuities of internally threaded fasteners

FA/363 ASTM F812
FA/365 SAE J122
FA/727 ISO 6157-2

NVLAP LAB CODE 200203-0

Fuji Buhin Kogyo Kabushiki Kaisha

47-1 Fujikura-Cho
Ohta Gunma 373-8501
JAPAN
Contact: Mr. Shinji Kanai
Phone: 276-31-2311
Fax: 276-31-9621

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code *Designation*

Dimensional Inspection

Internal thread parameters - system 21

FA/621 JIS B0251
FA/622 JIS B0252
FA/623 JIS B1071

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/574 JIS B1051 Sec. 4.2.2

Measurement of fastener coating thickness - coulometric method

FA/597 JIS H8501

Microhardness of fasteners

FA/620 JIS Z2244

Prevailing torque

FA/600 JIS B1056

Proof load of internally threaded fasteners (nuts)

FA/601 JIS B1052

Rockwell hardness of fasteners

FA/572 JIS Z2245

Salt spray testing of fasteners

FA/569 JIS Z2371

Wedge tensile strength of full-size threaded fasteners

FA/575 JIS B1051 Sec. 4.2.3

NVLAP LAB CODE 200204-0

EMSL Analytical, Inc.

19595 NE 10th Ave., Bay C
N. Miami Beach, FL 33179
Contact: Ms. Kimberly A. Wallace
Phone: 305-650-0577
Fax: 305-650-0578

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: March 31, 1999

Airborne Asbestos Analysis (TEM)

Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 200205-0

Sannohashi Corporation

1218 Ohsone
Yashioshi, Saitama-ken 340
JAPAN
Contact: Mr. Takeru Nagashima
Phone: 011-81-3-3890-4101
Fax: 011-81-3-3854-5761

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/607 JIS B1071

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/574 JIS B1051 Sec. 4.2.2

Measurement of fastener coating thickness - eddy-current method

FA/618 JIS H8501

Measurement of fastener coating thickness - weight of coating

FA/619 JIS H8501

Proof load of internally threaded fasteners (nuts)

FA/601 JIS B1052

Rockwell hardness of fasteners

FA/572 JIS Z2245

Wedge tensile strength of full-size threaded fasteners	
FA/575	JIS B1051 Sec. 4.2.3

NVLAP LAB CODE 200207-0

Kansai Electronic Industry Development Center, Ikoma Testing Lab.
10630 Takayama-cho
Ikoma Nara 630-0101
JAPAN
Contact: Mr. Tadayoshi Sakabe
Phone: 0743-78-0283
Fax: 0743-79-1014

URL: http://www.kec.or.jp/

FCC Test Methods
Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200208-0

Ingersoll Fasteners
390 Thomas Street
Ingersoll Ontario N5C 3K3
CANADA
Contact: Mr. Alan Palmer
Phone: 519-485-4610
Fax: 519-485-2435
E-Mail: IFQA@IVACO.COM

Fasteners & Metals
Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of general purpose fasteners and high-volume machine assembly fasteners	
FA/404	ANSI/ASME B18.18.2M
External thread parameters - system 21	
FA/379	ANSI/ASME B1.3M
External thread parameters - system 22	
FA/381	ANSI/ASME B1.3M
Internal thread parameters - system 21	
FA/391	ANSI/ASME B1.3M
Mechanical and Physical Testing and Inspection	
Axial tensile strength of full-size threaded fasteners	
FA/273	SAE J429
FA/578	SAE J1216 Sec. 3.5
Cone proof load of internally threaded fasteners (nuts)	
FA/220	ASTM F606 Sec. 4.3
Measurement of fastener coating thickness - magnetic methods	
FA/153	ASTM B499
Microhardness of fasteners	
FA/189	ASTM E384
Proof load of full-size externally threaded fasteners	
FA/229	SAE J429 Sec. 5.3
FA/577	SAE J1216 Sec. 3.3
Proof load of internally threaded fasteners (nuts)	
FA/241	SAE J995 Sec. 5.1
Rockwell hardness of fasteners	
FA/197	ASTM E18
Rockwell superficial hardness of fasteners	
FA/205	ASTM E18
Salt spray testing of fasteners	
FA/166	ASTM B117
Tension testing of machined specimens from externally threaded fasteners	
FA/278	ASTM A370
Wedge tensile strength of full-size threaded fasteners	
FA/468	SAE J429 Sec. 5.5
FA/579	SAE J1216 Sec. 3.6
Metallography	
Decarburization and case depth measurement in fasteners	
FA/328	SAE J121
Macroscopic examination of fasteners by etching	
FA/337	SAE J1061
Microscopic examination of fasteners by etching	
FA/344	SAE J121
Surface discontinuities of externally threaded fasteners	
FA/362	SAE J1061
Surface discontinuities of internally threaded fasteners	
FA/363	ASTM F812

NVLAP LAB CODE 200210-0

Rightway Fasteners, Inc.
7945 South International Drive
Columbus, IN 47201-9329
Contact: Mr. Dennis Gray
Phone: 812-342-2700
Fax: 812-341-3500

Fasteners & Metals
Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*

Dimensional Inspection

Dimensions of fasteners - flange screw heads and flange nuts

FA/690	JIS B1071

Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets

FA/689	JIS B1071

Dimensions of fasteners - straightness

FA/648	JIS B1071

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/607	JIS B1071

Mechanical and Physical Testing and Inspection

Adhesion of metallic coatings on fasteners

FA/595	JIS H8504

Axial tensile strength of full-size threaded fasteners

FA/574	JIS B1051 Sec. 4.2.2

Measurement of fastener coating thickness - weight of coating

FA/619	JIS H8501

Rockwell hardness of fasteners

FA/572	JIS Z2245

Rockwell superficial hardness of fasteners

FA/699	JIS Z2245

Salt spray testing of fasteners

FA/569	JIS Z2371

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/571	JIS Z2244

Wedge tensile strength of full-size threaded fasteners

FA/575	JIS B1051 Sec. 4.2.3

NVLAP LAB CODE 200212-0

Sundram Fasteners Limited (Inhouse test laboratory)

Padi
Chennai (Madras), Tamil, Nadh 600 050
INDIA
Contact: Mr. Sampathkumar Moorthy
Phone: 91-44-852-1870
Fax: 91-44-853-5435

Fasteners & Metals
Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*

Dimensional Inspection

Dimensions of ISO grade A and B fasteners

FA/408	ISO 4759-1

Dimensions of ISO grade C fasteners

FA/410	ISO 4759-1

Dimensions of fasteners - flange screw heads and flange nuts

FA/669	ISO 4161
FA/670	ISO 4162

Dimensions of fasteners - gaging for slotted nuts

FA/980	ISO 4759-2

Dimensions of fasteners - straightness

FA/668	ISO 4759-1

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/665	ISO 4759-1

External thread parameters - ISO

FA/390	ISO 1502

External thread parameters - SAE fastener with MJ metric screw threads

FA/389	SAE MA1566
FA/661	ISO 4759-1
FA/662	ISO 1502

External thread parameters - system 21

FA/659	ISO 4759-1
FA/660	ISO 1502

Internal thread parameters - ISO

FA/402	ISO 1502
FA/664	ISO 4759-1

Internal thread parameters - SAE fastener with MJ metric screw threads

FA/979	ISO 4759-1

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/266	ASTM F606 Sec. 3.4.1-3.4.3
FA/270	ISO 898-1 Sec. 8.2
FA/273	SAE J429
FA/274	SAE J1216

Brinell hardness of fasteners

FA/466	ISO 6506

Cone proof load of internally threaded fasteners (nuts)

FA/220	ASTM F606 Sec. 4.3
FA/221	ASTM F606M Sec. 4.3
FA/223	SAE J122 Sec. 4.3

Microhardness of fasteners

FA/657	ASTM E92

Prevailing torque

FA/217	IFI-100/107
FA/218	ISO 2320

Proof load of full-size externally threaded fasteners

FA/226	ASTM F606 Sec. 3.2.1-3.2.3
FA/228	ISO 898-1 Sec. 8.4
FA/229	SAE J429 Sec. 5.3
FA/230	SAE J1216 Sec. 3.3
FA/467	ASTM F606M Sec. 3.2.1-3.2.3

Proof load of internally threaded fasteners (nuts)

FA/236	ASTM F606 Sec. 4.2
FA/237	ASTM F606M Sec. 4.2
FA/239	ISO 898-2 Sec. 8.1
FA/240	ISO 898-6 Sec. 8.1
FA/241	SAE J995 Sec. 5.1

Rockwell hardness of fasteners

FA/197	ASTM E18
FA/200	ISO 6508

Salt spray testing of fasteners

FA/166	ASTM B117

Tension testing of machined specimens from externally threaded fasteners

FA/279	ASTM F606 Sec. 3.6
FA/280	ASTM F606M Sec. 3.6
FA/282	ISO 898-1
FA/283	SAE J429
FA/284	SAE J1216

Torque-tension of full-size threaded fasteners

FA/306	IFI-101
FA/308	SAE J174

Total extension at fracture of externally threaded fasteners

FA/285	ASTM F606 Sec. 3.7
FA/286	ASTM F606M Sec. 3.7

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/658	ISO 6507-1

Wedge tensile strength of full-size threaded fasteners

FA/290	ASTM F606 Sec. 3.5
FA/291	ASTM F606M Sec. 3.5
FA/294	ISO 898-1 Sec. 8.5
FA/468	SAE J429 Sec. 5.5
FA/469	SAE J1216 Sec. 3.6

Yield strength of full-size externally threaded fasteners

FA/298	ASTM F606 Sec. 3.2.4
FA/300	ASTM F606M Sec. 3.2.4

Metallography

Decarburization and case depth measurement in fasteners

FA/323	ASTM E1077
FA/328	SAE J121
FA/329	SAE J419
FA/330	SAE J423

Determination of grain size of fasteners

FA/331	ASTM E112
FA/333	SAE J418

Macroscopic examination of fasteners by etching

FA/334	ISO 6157-1
FA/335	ISO 6157-3
FA/336	SAE J123

Surface discontinuities of externally threaded fasteners

FA/357	ASTM F788/788M
FA/359	ISO 6157-1
FA/361	SAE J123

Surface discontinuities of internally threaded fasteners

FA/365	SAE J122
FA/865	ASTM F812/F812M

Nondestructive Inspection

Magnetic particle inspection of fasteners

FA/374	ASTM E709
FA/378	SAE J420

NVLAP LAB CODE 200213-0

Aoyama Fastener Laboratory

c/o Aoyama Seisakusho
1-8 Takahashi, Ohguchi-cho
Niwa-gun, Aichi Prefecture 480-0198
JAPAN
Contact: Mr. Shinichi Kondo
Phone: 0587-95-1160
Fax: 0587-95-1939

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

NVLAP Code	*Designation*
FA/607	JIS B1071
FA/675	JIS B1012

Surface texture

FA/650	JIS B1071

Mechanical and Physical Testing and Inspection

Adhesion of metallic coatings on fasteners

FA/595	JIS H8504

Axial tensile strength of full-size threaded fasteners

FA/574	JIS B1051 Sec. 4.2.2

Measurement of fastener coating thickness - coulometric method

FA/597	JIS H8501

Measurement of fastener coating thickness - eddy-current method

FA/618	JIS H8501

Measurement of fastener coating thickness - microscopical method

FA/640	JIS H8501

Measurement of fastener coating thickness - weight of coating

FA/619	JIS H8501

Microhardness of fasteners

FA/620	JIS Z2244

Proof load of internally threaded fasteners (nuts)

FA/601	JIS B1052

Rockwell hardness of fasteners

FA/572	JIS Z2245
FA/683	JIS B1052
FA/707	JIS B1051 Sec. 4.2.5

Salt spray testing of fasteners

FA/598	JIS H8502

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/571	JIS Z2244
FA/643	JIS B1051 Sec. 4.2.5
FA/684	JIS B1052

Wedge tensile strength of full-size threaded fasteners

FA/575	JIS B1051 Sec. 4.2.3
FA/685	JIS D4604 Sec. 7.7(1)

Yield strength of full-size externally threaded fasteners

FA/686	JIS B1051 Sec. 4.2.2

Metallography

Decarburization and case depth measurement in fasteners

FA/645	JIS B1051

NVLAP LAB CODE 200214-0

Underwriters Laboratories Inc.

2600 N.W. Lake Road
Camas, WA 98607-8542
Contact: Mr. J. R. Beyreis
Phone: 847-272-8800
Fax: 847-272-8129
E-Mail: beyreisj@ul.com
URL: http://www.ul.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

Australian Standards referred to by clauses in AUSTEL Technical Standards

NVLAP Code	*Designation*
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200215-0

Sumitomo Metal Technology, Inc. Kokura Division

1, Konomi-machi, Kokurakita-ku
Kitakyushu 803-0803
JAPAN
Contact: Mr. Masanao Nakamura
Phone: 81-93-581-3289
Fax: 81-93-561-8099
E-Mail: nakamura-msn@aw.sumikin.co.jp

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

Chemical Analysis

Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen

NVLAP Code	*Designation*
FA/586	JIS G1211
FA/587	JIS G1215

Optical emission spectrochemical analysis

FA/588	JIS G1253
FA/681	JIS G1258

Solution chemical analysis

FA/680	JIS G1227

NVLAP LAB CODE 200216-0

Battelle - Pacific Northwest National Laboratory

Battelle Boulevard (Mail Stop K3-55)
P.O. Box 999
Richland, WA 99352-4553
Contact: Mr. Jack J. Fix
Phone: 509-375-2512
Fax: 509-373-0167
E-Mail: jack.fix@pnl.gov
URL: http://www.pnl.gov/health/health_prot/

Ionizing Radiation Dosimetry

Accreditation Valid Through: September 30, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeters listed below through employing the Harshaw automatic reader model 8800 and manual reader model 6600.

This facility is accredited to process the following dosimeters by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993 and ANSI HPS N13.32-1995 through testing.

Harshaw Card 7776 (15, 15, 6, 15) in a Type 8825 holder for ANSI-N13.11 categories I, II, IIIA, IIIB, IV, VC, VI, VII, VIII.

Harshaw Combo 7777-7666 in a 8816 and 8825 model holder for ANSI-N13.11 category VIII.

Harshaw extremity TLD XD-740 in a finger ring holder for ANSI HPS N13.32 (NIST Handbook 150-4, Table 2) categories I, II, IIIA, IVA, VC.

NVLAP LAB CODE 200217-0

Tokin EMC Engineering Co., Ltd. Kawasaki Facility

398, Shiboguchi Takatsu-ku
Kawasaki-city, Kanagawa 213
JAPAN
Contact: Mr. Hiro Shida
Phone: 81-298-37-2400
Fax: 81-298-37-2401

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200218-0

Tokin EMC Engineering Co., Ltd. Osaka Testing Laboratory

49, Aza-Miyanowaki, Sakai
Sanda-city, Hyogo 669-14
JAPAN
Contact: Mr. Motoji Nakai
Phone: 81-795-69-1290
Fax: 81-795-69-0079

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200219-0

Tokin EMC Engineering Co., Ltd. Nagoya Testing Laboratory

1684, Nishinoda, Nyugawakami
Daian-cho, Inabe-gun, Mie 511-0261
JAPAN
Contact: Mr. Masa Hirai
Phone: 81-594-78-2730
Fax: 81-594-78-2779
E-Mail: GAE01253@nifty.ne.jp

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200220-0

Korea Tokin EMC Engineering Co., Ltd.

820-2, Wolmoon-Ri, WaBu-up
Namyangju-si, Kyunggi-Do
KOREA
Contact: Mr. Charlies Park
Phone: 82-346-576-2204
Fax: 82-346-576-2205
E-Mail: ktemc@united.co.kr

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200221-0

Tokin EMC Engineering Co., Ltd. Tsukuba Testing Laboratory

28-1, Aza-Kitahara
Ohaza- Hanashimashinden
Tsukuba-city, Ibaraki 305
JAPAN
Contact: Mr. Hira Shida
Phone: 81-298-37-2400
Fax: 81-298-37-2401

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200222-0

NAWC-Aircraft Div. Lakehurst Electromagnetic Interference Lab.

Highway 547, 355-2, Code 48L500B
Lakehurst, NJ 08733-5100
Contact: Mr. Richard Howlett
Phone: 732-323-2951
Fax: 732-323-1464
E-Mail: howletrm@lakehurst.navy.mil

MIL-STD-462 Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A01	MIL-STD-462 Method CE01
12/A04	MIL-STD-462 Method CE02
12/A06	MIL-STD-462 Method CE03
12/A12	MIL-STD-462 Method CE07
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B05	MIL-STD-462 Method CS06
12/B08	MIL-STD-462 Method CS10
12/B09	MIL-STD-462 Method CS11
Radiated Emissions:	
12/D01	MIL-STD-462 Method RE01
12/D02	MIL-STD-462 Method RE02
Radiated Susceptibility:	
12/E01	MIL-STD-462 Method RS01
12/E02	MIL-STD-462 Method RS02
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)

NVLAP LAB CODE 200223-0

Metallic Material Laboratory in Toyota Motor Co.

Quality Div., Toyota Motor Corporation
1 Toyota-cho
Toyota city Aichi 471-8571
JAPAN
Contact: Mr. Toji Sakota
Phone: 0565-23-3500
Fax: 0565-23-5730

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of fasteners - flange screw heads and flange nuts	
FA/690	JIS B1071
Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets	
FA/689	JIS B1071
Dimensions of fasteners - straightness	
FA/648	JIS B1071
Dimensions of general purpose fasteners and high-volume machine assembly fasteners	
FA/607	JIS B1071
External thread parameters - system 21	
FA/647	JIS B1071
Internal thread parameters - system 21	
FA/623	JIS B1071
Mechanical and Physical Testing and Inspection	
Axial tensile strength of full-size threaded fasteners	
FA/574	JIS B1051 Sec. 4.2.2
Measurement of fastener coating thickness - magnetic methods	
FA/596	JIS H8501

Measurement of fastener coating thickness - microscopical method

FA/640 JIS H8501

Microhardness of fasteners

FA/620 JIS Z2244

Proof load of internally threaded fasteners (nuts)

FA/601 JIS B1052

Salt spray testing of fasteners

FA/598 JIS H8502

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/571 JIS Z2244
FA/643 JIS B1051 Sec. 4.2.5
FA/684 JIS B1052

Wedge tensile strength of full-size threaded fasteners

FA/575 JIS B1051 Sec. 4.2.3

Metallography

Decarburization and case depth measurement in fasteners

FA/645 JIS B1051

NVLAP LAB CODE 200224-0

Northwestern Steel and Wire Company

121 Wallace Street
P.O. Box 618
Sterling, IL 61081
Contact: Mr. Robert C. Olson
Phone: 815-625-2500
Fax: 815-625-0227

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code *Designation*

Chemical Analysis

Optical emission spectrochemical analysis

FA/457 ASTM E415

NVLAP LAB CODE 200225-0

J.W. Mfg. DBA Van Petty Mfg.

2517 Azurite Circle
Newbury Park, CA 91320
Contact: Mr. Robert Bucholtz
Phone: 805-498-4594
Fax: 805-458-1021

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets

FA/411 ANSI/ASME B18.3

Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap

FA/405 ANSI/ASME B18.18.3M

External thread parameters - system 22

FA/382 FED-STD-H28/20

Surface texture

FA/439 ANSI/ASME B46.1

Mechanical and Physical Testing and Inspection

Double shear of externally threaded fasteners

FA/257 MIL-STD-1312-13

Rockwell hardness of fasteners

FA/201 MIL-STD-1312-6

Stress rupture of fasteners

FA/262 MIL-STD-1312-10

Wedge tensile strength of full-size threaded fasteners

FA/290 ASTM F606 Sec. 3.5
FA/295 MIL-STD-1312-8

Metallography

Decarburization and case depth measurement in fasteners

FA/323 ASTM E1077

Determination of grain size of fasteners

FA/331 ASTM E112
FA/550 ASTM E3

Macroscopic examination of fasteners by etching

FA/511 ASTM E340
FA/551 ASTM E3

Microscopic examination of fasteners by etching

FA/512 ASTM E407
FA/552 ASTM E3

Nondestructive Inspection

Liquid penetrant inspection of fasteners

FA/527 ASTM E1417

Magnetic particle inspection of fasteners

FA/485 ASTM E1444

NVLAP LAB CODE 200226-0

Sugiura Seisakusho Co., Ltd.

22, Miyakoshi, Terazu-cho
Nishio Aichi 444-03
JAPAN
Contact: Mr. Shigemitsu Shibata
Phone: 0563-59-0728
Fax: 0563-59-0744
E-Mail: sscshiba@mx01.tns.or.jp

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of fasteners - gaging for slotted nuts

FA/698 JIS B1170
FA/721 JIS B1071

External thread parameters - ISO

FA/676 JIS B1071

Internal thread parameters - ISO

FA/720 JIS B1071

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/574 JIS B1051 Sec. 4.2.2

Measurement of fastener coating thickness - X-ray methods

FA/641 JIS H8501

Prevailing torque

FA/600 JIS B1056

Proof load of internally threaded fasteners (nuts)

FA/601 JIS B1052

Rockwell hardness of fasteners

FA/572 JIS Z2245

Salt spray testing of fasteners

FA/598 JIS H8502

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/571 JIS Z2244
FA/643 JIS B1051 Sec. 4.2.5
FA/684 JIS B1052

Wedge tensile strength of full-size threaded fasteners

FA/575 JIS B1051 Sec. 4.2.3

Metallography

Surface discontinuities of externally threaded fasteners

FA/603 JIS B1043
FA/646 JIS B1041

Surface discontinuities of internally threaded fasteners

FA/604 JIS B1042

NVLAP LAB CODE 200227-0

Owari Precise Products Co., Ltd.

148 2-chome, Yada-cho, Higashi-ku
Nagoya 461-8678
JAPAN
Contact: Mr. Kouichi Furuichi
Phone: 052-721-7131
Fax: 052-723-2966

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/607 JIS B1071
FA/675 JIS B1012

Surface texture

FA/650 JIS B1071

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/574 JIS B1051 Sec. 4.2.2

Measurement of fastener coating thickness - X-ray methods

FA/641 JIS H8501

Measurement of fastener coating thickness - microscopical method

FA/640 JIS H8501

Measurement of fastener coating thickness - weight of coating

FA/619 JIS H8501

Microhardness of fasteners

FA/620 JIS Z2244

Prevailing torque

FA/600 JIS B1056

Proof load of full-size externally threaded fasteners

FA/573 JIS B1051 Sec. 4.2.4

Proof load of internally threaded fasteners (nuts)

FA/601 JIS B1052
FA/713 JIS B1056

Rockwell hardness of fasteners

FA/572 JIS Z2245

Salt spray testing of fasteners

FA/569 JIS Z2371

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/571 JIS Z2244

Wedge tensile strength of full-size threaded fasteners

FA/575 JIS B1051 Sec. 4.2.3

Yield strength of full-size externally threaded fasteners

FA/714 JIS Z2241

Metallography

Decarburization and case depth measurement in fasteners

FA/645 JIS B1051

Surface discontinuities of externally threaded fasteners

FA/603 JIS B1043
FA/646 JIS B1041

Surface discontinuities of internally threaded fasteners

FA/604 JIS B1042

NVLAP LAB CODE 200228-0

Oak Ridge National Laboratory

Bethel Valley Road
P.O. Box 2008
Oak Ridge, TN 37831-6292
Contact: Mr. Brian A. Jerome
Phone: 423-574-6167
Fax: 423-576-5070
E-Mail: jeromeba@ornl.gov

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200229-0

Minebea Co., Ltd. Fujisawa Manufacturing Unit

1-1-1 Katase
Fujisawa, Kanagawa 251
JAPAN
Contact: Mr. Yukio Shimada
Phone: 0466-23-2137
Fax: 0466-27-6449

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*

Chemical Analysis

Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen

FA/472 ASTM E1447

Dimensional Inspection

Dimensions of fasteners - bearing surface squareness

FA/649 JIS B1071

Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets

FA/539 SAE AS 870
FA/790 SBAC RS680

Dimensions of fasteners - straightness

FA/648 JIS B1071

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/607 JIS B1071
FA/791 NAS 527

External thread parameters - system 21

FA/379 ANSI/ASME B1.3M
FA/380 FED-STD-H28/20A

External thread parameters - system 22

FA/381 ANSI/ASME B1.3M
FA/382 FED-STD-H28/20A

External thread parameters - system 23

FA/385 ANSI/ASME B1.3M
FA/386 FED-STD-H28/20A

Surface texture

FA/439 ANSI/ASME B46.1
FA/650 JIS B1071
FA/771 BS 1134, Part 1

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/266 ASTM F606 Sec. 3.4.1-3.4.3
FA/271 MIL-STD-1312-8
FA/574 JIS B1051 Sec. 4.2.2

Double shear of externally threaded fasteners

FA/257 MIL-STD-1312-13

Elevated temperature testing capability

FA/505 MIL-STD-1312-18

Fatigue of full-size threaded fasteners

FA/183 MIL-STD-1312-11

Hardness preparation

FA/482 ASTM F606

Head soundness testing

FA/615 JIS B1051 Sec. 4.2.6

Humidity testing of fasteners

FA/170 QQ-P-35

Measurement of fastener coating thickness - dimensional change method

FA/495 MIL-STD-1312-12

Measurement of fastener coating thickness - eddy-current method

FA/618 JIS H8501

Measurement of fastener coating thickness - microscopical method

FA/163 MIL-STD-1312-12
FA/640 JIS H8501

Measurement of fastener coating thickness - weight of coating

FA/619 JIS H8501

Microhardness of fasteners

FA/193 MIL-STD-1312-6
FA/620 JIS Z2244
FA/642 JIS B1051 Sec. 4.2.5

Proof load of full-size externally threaded fasteners

FA/573 JIS B1051 Sec. 4.2.4

Recess strength test in both the installation and removal directions

FA/476 MIL-STD-1312-25

Rockwell hardness of fasteners

FA/197 ASTM E18
FA/201 MIL-STD-1312-6
FA/572 JIS Z2245
FA/707 JIS B1051 Sec. 4.2.5
FA/765 BS EN 10109-1

Rockwell superficial hardness of fasteners

FA/205 ASTM E18
FA/209 MIL-STD-1312-6
FA/766 BS EN 10109-1

Salt spray testing of fasteners

FA/166 ASTM B117
FA/168 MIL-STD-1312-1
FA/569 JIS Z2371

Stress rupture of fasteners

FA/260 ASTM E139
FA/767 BS 4A 4,Part 1,Sec 3

Tension testing of machined specimens from externally threaded fasteners

FA/581 JIS B1051 Sec. 4.2.1
FA/582 JIS Z2241
FA/768 BS 4A 4,Part 1,Sec 1

Wedge tensile strength of full-size threaded fasteners

FA/290 ASTM F606 Sec. 3.5
FA/575 JIS B1051 Sec. 4.2.3

Metallography

Decarburization and case depth measurement in fasteners

FA/645 JIS B1051
FA/692 MIL-STD-1312-6

(See 'How To Use This Directory' on page 7.)

Determination of grain size of fasteners	
FA/331	ASTM E112
Macroscopic examination of fasteners by etching	
FA/511	ASTM E340
FA/769	AMS 7477
FA/780	SBAC TS21
FA/782	SBAC TS22
FA/783	SBAC TS23
FA/786	SBAC TS24
FA/787	SBAC TS25
Microscopic examination of fasteners by etching	
FA/512	ASTM E407
FA/770	AMS 7477
FA/781	SBAC TS21
FA/784	SBAC TS22
FA/785	SBAC TS23
FA/788	SBAC TS24
FA/789	SBAC TS25
Surface discontinuities of externally threaded fasteners	
FA/603	JIS B1043
FA/646	JIS B1041

Nondestructive Inspection

Liquid penetrant inspection of fasteners	
FA/371	MIL-STD-6866
FA/527	ASTM E1417
Magnetic particle inspection of fasteners	
FA/377	MIL-STD-1949
FA/485	ASTM E1444

NVLAP LAB CODE 200230-0

Wolverine Plating Corp.

29456 Groesbeck Highway
Roseville, MI 48066-1943
Contact: Mr. Kenneth Wrobel
Phone: 810-771-5000
Fax: 810-771-5830
E-Mail: wolvpltg@aol.com

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

Mechanical and Physical Testing and Inspection

NVLAP Code	*Designation*
Adhesion of metallic coatings on fasteners	
FA/143	ASTM B571
Measurement of fastener coating thickness - X-ray methods	
FA/556	ASTM B568
Salt spray testing of fasteners	
FA/166	ASTM B117

NVLAP LAB CODE 200231-0

U.S. EPA

P.O. Box 98517
Las Vegas, NV 89193-8517
Contact: Mr. Christopher Fontana
Phone: 702-798-2429
Fax: 702-733-8013
E-Mail: fontana-chris@wpmail.las.wpa.gov

Ionizing Radiation Dosimetry

Accreditation Valid Through: December 31, 1999

This facility has been evaluated and deemed competent to process the radiation dosimeter listed below through employing the Panasonic automatic reader model UD710A.

This facility is accredited to process the following dosimeter by virtue of actual demonstration of compliance with ANSI HPS N13.11-1993.

Panasonic TLD model UD802AT in a UD874 holder for ANSI-N13.11 categories I, II, IIIA, IV, VC, VI, VII.

NVLAP LAB CODE 200232-0

LA Testing

159 Pasadena Avenue
S. Pasadena, CA 91030
Contact: Ms. Cristina E. Tabatt
Phone: 323-254-9960
Fax: 323-254-9982

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)

Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200233-0

SGI EMC Laboratories

P.O. Box 7311
2011 N. Shoreline Blvd., MS 946
Mountain View, CA 94039
Contact: Mr. David M. Hanttula
Phone: 650-933-1071
Fax: 650-932-0250
E-Mail: hanttula@engr.sgi.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices

12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200234-0

International Standards Laboratory

21, Alley 37, Lane 122, Sec. 2
Hsiwan Road
Hsichih Chen, Taipei 221
TAIWAN
Contact: Mr. Jammy Chen
Phone: 886-2-2646-2550
Fax: 886-2-2646-4641

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200236-0

Accredited Environmental Technologies, Inc.

State Road 1426
Leland, NC 28451
Contact: Mr. Peter J. Burke
Phone: 910-371-4620
Fax: 910-371-4908

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 200237-0

Compliance Test Laboratories, Inc.

137 Airport Road
P.O. Box 120
Liberty, SC 29657
Contact: Mr. Pryor McGinnis
Phone: 864-843-1604
Fax: 864-843-1812
E-Mail: ctl@prodigy.net

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T50	AS/NZS 3260
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200239-0

Meidoh Laboratory

4-5 Sangen-Cho
Toyota, Aichi 471-0037
JAPAN
Contact: Mr. Satoki Akiba
Phone: 0565-31-0330
Fax: 0565-31-2153

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
External thread parameters - system 21	
FA/647	JIS B1071
Internal thread parameters - system 21	
FA/623	JIS B1071
Mechanical and Physical Testing and Inspection	
Axial tensile strength of full-size threaded fasteners	
FA/574	JIS B1051 Sec. 4.2.2

Measurement of fastener coating thickness - magnetic methods

FA/596 JIS H8501

Measurement of fastener coating thickness - microscopical method

FA/640 JIS H8501

Microhardness of fasteners

FA/620 JIS Z2244
FA/642 JIS B1051 Sec. 4.2.5

Proof load of internally threaded fasteners (nuts)

FA/601 JIS B1052

Salt spray testing of fasteners

FA/598 JIS H8502

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/571 JIS Z2244
FA/684 JIS B1052
FA/952 JIS Z2251

Wedge tensile strength of full-size threaded fasteners

FA/575 JIS B1051 Sec. 4.2.3

NVLAP LAB CODE 200240-0

CAM Environmental Services, Inc.

312 South Richey Street
Pasadena, TX 77506-1059
Contact: Ms. Julia A. Terrell
Phone: 713-475-9003
Fax: 713-472-2117
E-Mail: camenviro@earthlink.net

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200242-0

Topura Co., Ltd. Osaka

4-10-2 Kisabe-Minami
Katano, Osaka 576-0035
JAPAN
Contact: Mr. Katsuzo Fujihira
Phone: 0463-82-4179
Fax: 0463-82-6169

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/607 JIS B1071
FA/675 JIS B1012
FA/682 JASO F116

External thread parameters - ISO

FA/676 JIS B1071

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/574 JIS B1051 Sec. 4.2.2
FA/672 JIS B1054

Embrittlement test of washers

FA/673 JIS B1252

Head soundness testing

FA/615 JIS B1051 Sec. 4.2.6

Measurement of fastener coating thickness - eddy-current method

FA/618 JIS H8501

Measurement of fastener coating thickness - weight of coating

FA/619 JIS H8501

Microhardness of fasteners

FA/620 JIS Z2244

Proof load of full-size externally threaded fasteners

FA/573 JIS B1051 Sec. 4.2.4

Recovery test of washers

FA/674 JIS B1252
FA/677 JIS B1251

Rockwell hardness of fasteners

FA/707 JIS B1051 Sec. 4.2.5

Salt spray testing of fasteners

FA/569 JIS Z2371
FA/598 JIS H8502

Twist test of lock washers

FA/678 JIS B1251

Wedge tensile strength of full-size threaded fasteners

FA/575 JIS B1051 Sec. 4.2.3

Metallography

Decarburization and case depth measurement in fasteners

FA/645 JIS B1051

Surface discontinuities of externally threaded fasteners

FA/603 JIS B1043
FA/646 JIS B1041

NVLAP LAB CODE 200243-0

Topura Co., Ltd. Tokai

2158-96 Kaizan, Aza Shiobara Shinden
Hamaoka-cho
Ogasagun,Shizuoka 437-1614
JAPAN
Contact: Mr. Katsuzo Fujihira
Phone: 0463-82-4179
Fax: 0463-82-6169

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/607 JIS B1071
FA/675 JIS B1012

FA/682 JASO F116

External thread parameters - ISO

FA/676 JIS B1071

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/574 JIS B1051 Sec. 4.2.2
FA/672 JIS B1054

Embrittlement test of washers

FA/673 JIS B1252

Head soundness testing

FA/615 JIS B1051 Sec. 4.2.6

Measurement of fastener coating thickness - eddy-current method

FA/618 JIS H8501

Measurement of fastener coating thickness - weight of coating

FA/619 JIS H8501

Microhardness of fasteners

FA/620 JIS Z2244

Proof load of full-size externally threaded fasteners

FA/573 JIS B1051 Sec. 4.2.4

Recovery test of washers

FA/674 JIS B1252
FA/677 JIS B1251

Rockwell hardness of fasteners

FA/707 JIS B1051 Sec. 4.2.5

Salt spray testing of fasteners

FA/569 JIS Z2371
FA/598 JIS H8502

Twist test of lock washers

FA/678 JIS B1251

Wedge tensile strength of full-size threaded fasteners

FA/575 JIS B1051 Sec. 4.2.3

Metallography

Decarburization and case depth measurement in fasteners

FA/645 JIS B1051

Surface discontinuities of externally threaded fasteners

FA/603 JIS B1043
FA/646 JIS B1041

NVLAP LAB CODE 200244-0

Oak Ridge National Laboratory Electric Machinery Center

P.O. Box 2009
Oak Ridge, TN 37831-8038
Contact: Mr. John Kueck
Phone: 423-576-4454
Fax: 423-576-0493
E-Mail: KU5@ornl.gov

Efficiency of Electric Motors

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
24/M01	IEEE 112, Method B

NVLAP LAB CODE 200245-0

RheinTexas, Inc.

1701 East Plano Parkway, Suite 150
Plano, TX 75074-8127
Contact: Mr. Murrell Waldron
Phone: 972-509-2566
Fax: 972-509-0073

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code *Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51 AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22 IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200246-0

Underwriters Laboratories, Inc.

12 Laboratory Drive
Research Triangle Park, NC 27709
Contact: Mr. James R. Beyreis
Phone: 847-272-8800
Fax: 847-272-8129
E-Mail: beyreisj@ul.com
URL: http://www.ul.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code *Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51 AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22 IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

(See 'How To Use This Directory' on page 7.)

NVLAP LAB CODE 200247-0

EMSL Analytical, Inc.
4037 E. Independence Blvd., Suite 630
Charlotte, NC 28205
Contact: Mr. Ronald K. Mahoney
Phone: 704-567-1521
Fax: 704-567-1394

URL: http://www.emsl.com/

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200248-0

Orfield Laboratories, Inc.
2709 E. 25th Street
Minneapolis, MN 55406
Contact: Mr. Steven J. Orfield
Phone: 612-721-2455
Fax: 612--721-2457

Acoustical Testing Services
Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P06	ASTM E90 (ISO 140, Part 3)
08/P10	ANSI S12.31 (ISO 3741)
08/P21	ISO 3745
08/P30	ASTM E1408
08/P31	ASTM E336
08/P32	ASTM E1007
08/P37	ASTM E966

NVLAP LAB CODE 200249-0

Quest MicroAnalytics, Inc.
2530 Electronic Lane, Suite 712
Dallas, TX 75220-1229
Contact: Ms. Jennifer Jaber
Phone: 214-351-4441
Fax: 214-351-4487

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200250-0

ATC Associates Inc.
8989 Herrmann Drive
Columbia, MD 21045-4710
Contact: Dr. Bharatha Lakshmi
Phone: 410-381-0232
Fax: 410-381-8908
E-Mail: lakshmi9@atc-enviro.com

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200251-0

Storagtek Open Area Test Site
2270 So. 88th Street, MS-9172
Louisville, CO 80028-9172
Contact: Mr. Robert B. Reinert
Phone: 303-673-6256
Fax: 303-661-6717
E-Mail: reinerb@louisville.stortek.com

FCC Test Methods
Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200252-0

Underwriters Laboratories
1655 Scott Blvd.
Santa Clara, CA 95050
Contact: Mr. Rick A. Titus
Phone: 847-272-8800 x43281
Fax: 847-509-6219
E-Mail: titusr@ul.com
URL: http://www.ul.com

FCC Test Methods
Accreditation Valid Through: December 31, 1999
NVLAP
Code *Designation*

AUSTEL Technical Standards as determined under the Telecommunications Act of 1991

12/T41 TS-001
12/T42 TS-002
12/T44 TS-004
12/T45 TS-006

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T50 AS/NZS 3260
12/T51 AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b Radiated Emissions
12/T01 Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a 68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b 68.316 Hearing Aid Compatibility: technical standards
12/T01c 68.302 Environmental simulation (Par. a,b)

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22 IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200253-0

CBS Fasteners, Inc.
1345 N. Brasher Street
Anaheim, CA 92807
Contact: Mr. Bill Sisler
Phone: 714-779-6368
Fax: 714-779-0934

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets

FA/411 ANSI/ASME B18.3

Dimensions of fasteners - straightness

FA/423 ANSI/ASME B18.2.1

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/404 ANSI/ASME B18.18.2M

External thread parameters - system 22

FA/382 FED-STD-H28/20

Surface texture

FA/439 ANSI/ASME B46.1

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/271 MIL-STD-1312-8

Double shear of externally threaded fasteners

FA/257 MIL-STD-1312-13

Hydrogen embrittlement (stress durability) of externally threaded fasteners

FA/176 MIL-STD-1312-5

Magnetic permeability

FA/214 ASTM A342 Test Method 3

Measurement of fastener coating thickness - dimensional change method

FA/495 MIL-STD-1312-12

Measurement of fastener coating thickness - microscopical method

FA/163 MIL-STD-1312-12

Microhardness of fasteners

FA/193 MIL-STD-1312-6

Recess strength test in both the installation and removal directions

FA/476 MIL-STD-1312-25

Rockwell hardness of fasteners

FA/201 MIL-STD-1312-6

Rockwell superficial hardness of fasteners

FA/209 MIL-STD-1312-6

Single shear of externally threaded fasteners

FA/256 MIL-STD-1312-20

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/671 MIL-STD-1312-6

Wedge tensile strength of full-size threaded fasteners

FA/295 MIL-STD-1312-8

Metallography

Decarburization and case depth measurement in fasteners

FA/330 SAE J423
FA/483 ASTM A574 Sec. 12

Determination of grain size of fasteners

FA/638 ASTM E112

Macroscopic examination of fasteners by etching

FA/511 ASTM E340
FA/651 ASTM F788/788M

Microscopic examination of fasteners by etching

FA/341 ASTM E1077
FA/345 ASTM F788/788M
FA/351 ASTM E112
FA/512 ASTM E407
FA/552 ASTM E3
FA/679 ASTM A574

Surface discontinuities of externally threaded fasteners

FA/357 ASTM F788/788M

NVLAP LAB CODE 200254-0

Vermont Fasteners Manufacturing

50 Jonergin Drive
P.O. Box 50
Swanton, VT 05488-0050
Contact: Mr. Peter F. Kasper
Phone: 802-868-3663
Fax: 802-868-2089

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*

Dimensional Inspection

Dimensions of fasteners - straightness

FA/423 ANSI/ASME B18.2.1

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/403 ANSI/ASME B18.18.1M
FA/404 ANSI/ASME B18.18.2M
FA/494 ANSI B18.2.1

Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap

FA/405 ANSI/ASME B18.18.3M
FA/963 ANSI B18.2.1

External thread parameters - system 21

FA/379 ANSI/ASME B1.3M

External thread parameters - system 22

FA/381 ANSI/ASME B1.3M

Internal thread parameters - system 21

FA/391 ANSI/ASME B1.3M

Internal thread parameters - system 22

FA/393 ANSI/ASME B1.3M

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/265 ASTM A370 Sec. A3.2.1.4
FA/266 ASTM F606 Sec. 3.4.1-3.4.3
FA/273 SAE J429

Brinell hardness of fasteners

FA/185 ASTM A370 Sec. 16
FA/186 ASTM E10

Cone proof load of internally threaded fasteners (nuts)

FA/219 ASTM F812/F812M
FA/220 ASTM F606 Sec. 4.3
FA/655 ASTM A194/A194M

Hardness preparation

FA/482 ASTM F606

Measurement of fastener coating thickness - eddy-current method

FA/149 ASTM E376

Measurement of fastener coating thickness - magnetic methods

FA/155 ASTM E376

Microhardness of fasteners

FA/654 SAE J121

Proof load of full-size externally threaded fasteners

FA/225 ASTM A370 Sec. A3.2.1.1-A3.2.1.3
FA/226 ASTM F606 Sec. 3.2.1-3.2.3
FA/467 ASTM F606M Sec. 3.2.1-3.2.3

Proof load of internally threaded fasteners (nuts)

FA/235 ASTM A370 Sec. A3.5.1
FA/236 ASTM F606 Sec. 4.2
FA/237 ASTM F606M Sec. 4.2

Rockwell hardness of fasteners

FA/196 ASTM A370 Sec. 18
FA/197 ASTM E18

Rockwell superficial hardness of fasteners

FA/205 ASTM E18
FA/206 ASTM A370 Sec. 18

Rotational capacity of full-size fasteners

FA/243 ASTM A325
FA/245 ASTM A563
FA/965 AASHTO M164

Wedge tensile strength of full-size threaded fasteners

FA/289 ASTM A370
FA/290 ASTM F606 Sec. 3.5
FA/291 ASTM F606M Sec. 3.5
FA/468 SAE J429 Sec. 5.5

Metallography

Decarburization and case depth measurement in fasteners

FA/328 SAE J121
FA/964 ASTM A490

Macroscopic examination of fasteners by etching

FA/336 SAE J123
FA/337 SAE J1061
FA/651 ASTM F788/788M

Microscopic examination of fasteners by etching

FA/344 SAE J121

Surface discontinuities of externally threaded fasteners

FA/357 ASTM F788/788M
FA/361 SAE J123
FA/362 SAE J1061
FA/652 ASTM A490

Surface discontinuities of internally threaded fasteners

FA/363 ASTM F812
FA/365 SAE J122

Nondestructive Inspection

Magnetic particle inspection of fasteners

FA/374 ASTM E709

NVLAP LAB CODE 200255-0

Rockford Bolt & Steel Co.

126 Mill Street
Rockford, IL 61101
Contact: Mr. John Petty
Phone: 815-968-0514
Fax: 815-968-3111

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of fasteners - straightness	
FA/423	ANSI/ASME B18.2.1
External thread parameters - system 21	
FA/379	ANSI/ASME B1.3M
External thread parameters - system 22	
FA/381	ANSI/ASME B1.3M
Mechanical and Physical Testing and Inspection	
Axial tensile strength of full-size threaded fasteners	
FA/266	ASTM F606 Sec. 3.4.1-3.4.3
Hardness preparation	
FA/482	ASTM F606
Rockwell hardness of fasteners	
FA/202	SAE J417
Tension testing of machined specimens from externally threaded fasteners	
FA/278	ASTM A370
FA/279	ASTM F606 Sec. 3.6
Wedge tensile strength of full-size threaded fasteners	
FA/290	ASTM F606 Sec. 3.5
Yield strength of full-size externally threaded fasteners	
FA/298	ASTM F606 Sec. 3.2.4
FA/299	ASTM A370 Sec. A3.2.1.3(a)

NVLAP LAB CODE 200256-0

Sundram Fasteners Limited Chemical Testing Laboratory

Bonthapally Village, Medak District
Andhra Pradesh 502 313
INDIA
Contact: Mr. Sampathkumar Moorthy
Phone: 91-44-8521870
Fax: 91-44-853-5435

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Chemical Analysis	
Optical emission spectrochemical analysis	
FA/457	ASTM E415

NVLAP LAB CODE 200257-0

Asakawa Screw Co., Ltd. Kawawa Factory

1261 Nippa-cho Kohoku-ku
Yokohama 223
JAPAN
Contact: Mr. Tatsuhiko Asakawa
Phone: 045-531-1291
Fax: 045-543-7752

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets	
FA/697	JIS B1180
Internal thread parameters - ISO	
FA/696	JIS B1181
Mechanical and Physical Testing and Inspection	
Measurement of fastener coating thickness - X-ray methods	
FA/641	JIS H8501
Salt spray testing of fasteners	
FA/569	JIS Z2371

NVLAP LAB CODE 200258-0

W.R. Grace & Co.

62 Whittemore Avenue
Cambridge, MA 02140
Contact: Mr. James A. Lee
Phone: 617-498-4394
Fax: 617-498-4360
E-Mail: james.a.lee@grace.com

Construction Materials Testing

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Aggregates	
02/A03	ASTM C29
02/A04	ASTM C40
02/A07	ASTM C117
02/A09	ASTM C127
02/A10	ASTM C128
02/A12	ASTM C136
02/A15	ASTM D75
02/A44	ASTM C566
Cement	
02/A17	ASTM C109
02/A21	ASTM C157
02/A23	ASTM C185
02/A26	ASTM C191
02/A27	ASTM C204
02/A30	ASTM C266
02/A31	ASTM C305

02/A32	ASTM C430
02/A33	ASTM C451
Concrete	
02/A01	ASTM C39
02/A02	ASTM C617
02/A40	ASTM C78
02/A41	ASTM C192
02/A43	ASTM C1064
02/A45	ASTM C42
02/A47	ASTM C457
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173
Standard Practices	
02/A39	ASTM C1077

NVLAP LAB CODE 200259-0

PFU TECHNOCONSUL EMC Center

98-2 Nu, Unoke, Unoke-Machi, Kahoku-Gun
Ishikawa-Ken 929-1192
JAPAN
Contact: Mr. Yasuo Koyama
Phone: 81-76-283-8600
Fax: 81-76-283-8601
E-Mail: ykoyama@pfu.co.jp

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200260-0

Analab, LLC

P.O. Box 34
Spring Hill Road
Sterling, PA 18463
Contact: Mr. Paul Janecki
Phone: 717-689-3919
Fax: 717-689-3830
E-Mail: info@analab1.com
URL: http://www.analab1.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200261-0

Prottsa, S.A. de C.V.

Oriente 233 No. 91 Agricola Oriental
C.P. 08500
Mexico City
MEXICO
Contact: Mr. Gilberto Laguna
Phone: 5-558-85-77
Fax: 5-558-25-23

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of general purpose fasteners and high-volume machine assembly fasteners	
FA/403	ANSI/ASME B18.18.1M
FA/981	ANSI/ASME B1.3M
Mechanical and Physical Testing and Inspection	
Axial tensile strength of full-size threaded fasteners	
FA/266	ASTM F606 Sec. 3.4.1-3.4.3
Bend test of full size eyebolts	
FA/982	AAR 4-2-15 Section 8 (1969)
Cone proof load of internally threaded fasteners (nuts)	
FA/220	ASTM F606 Sec. 4.3
Hardness preparation	
FA/482	ASTM F606
Measurement of fastener coating thickness - magnetic methods	
FA/153	ASTM B499
Proof load of full-size externally threaded fasteners	
FA/226	ASTM F606 Sec. 3.2.1-3.2.3
FA/983	AAR 4-2-15 Section 9 (1969)

Proof load of internally threaded fasteners (nuts)

FA/235 ASTM A370 Sec. A3.5.1
FA/236 ASTM F606 Sec. 4.2

Rockwell hardness of fasteners

FA/196 ASTM A370 Sec. 18

Tension testing of machined specimens from externally threaded fasteners

FA/279 ASTM F606 Sec. 3.6

Torque-tension of full-size threaded fasteners

FA/984 AAR 4-2-15 Section 13b (1969)
FA/985 ASTM A183 Section 8.2.2
FA/986 Prottsa W.I. I.030 rev. b

Wedge tensile strength of full-size threaded fasteners

FA/290 ASTM F606 Sec. 3.5

Yield strength of full-size externally threaded fasteners

FA/298 ASTM F606 Sec. 3.2.4

NVLAP LAB CODE 200263-0

Electro. Meas. Off., Yokohama Res. & Dev. Ctr. Murata Mfg. Co.

Yokohama Research & Development Center
1-18 Hakusan 1-Chome, Midori-ku Yokohama
Kanagawa 226
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Contact: Mr. Yuji Nishimura
Phone: 045-939-7100
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E-Mail: nisimura@murata.co.jp

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code *Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51 AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22 IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200264-0

3V Fasteners Co. Inc. Testing Laboratory

1821 Railroad Street
Corona, CA 91720
Contact: Mr. Wayne C. Drysol
Phone: 909-734-4391
Fax: 909-734-0127
E-Mail: threev1@aol.com

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of fasteners - bearing surface squareness

FA/695 3V LTI-100-1

Dimensions of fasteners - straightness

FA/694 3V LTI-100-1

External thread parameters - SAE fastener with MJ metric screw threads

FA/693 FED-STD-H28/20

External thread parameters - system 22

FA/382 FED-STD-H28/20

External thread parameters - system 23

FA/386 FED-STD-H28/20

Surface texture

FA/439 ANSI/ASME B46.1

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/266 ASTM F606 Sec. 3.4.1-3.4.3
FA/271 MIL-STD-1312-8

Double shear of externally threaded fasteners

FA/257 MIL-STD-1312-13

Hydrogen embrittlement (stress durability) of externally threaded fasteners

FA/176 MIL-STD-1312-5

Magnetic permeability

FA/214 ASTM A342 Test Method 3

Measurement of fastener coating thickness - dimensional change method

FA/495 MIL-STD-1312-12

Measurement of fastener coating thickness - magnetic methods

FA/156 FED TM STD NO. 151 Method 520.1

Measurement of fastener coating thickness - microscopical method

FA/163 MIL-STD-1312-12

Microhardness of fasteners

FA/193 MIL-STD-1312-6

Proof load of full-size externally threaded fasteners

FA/226 ASTM F606 Sec. 3.2.1-3.2.3
FA/691 MIL-STD-1312-8

Recess strength test in both the installation and removal directions

FA/476 MIL-STD-1312-25

Rockwell hardness of fasteners

FA/201 MIL-STD-1312-6

Rockwell superficial hardness of fasteners

FA/205 ASTM E18

Tension testing of machined specimens from externally threaded fasteners

FA/279 ASTM F606 Sec. 3.6
FA/526 MIL-STD-1312-8

Wedge tensile strength of full-size threaded fasteners

FA/290 ASTM F606 Sec. 3.5
FA/295 MIL-STD-1312-8

Metallography

Decarburization and case depth measurement in fasteners

FA/483 ASTM A574 Sec. 12
FA/519 ASTM A574M
FA/692 MIL-STD-1312-6

Determination of grain size of fasteners

FA/331 ASTM E112

Macroscopic examination of fasteners by etching

FA/511 ASTM E340
FA/651 ASTM F788/788M

Microscopic examination of fasteners by etching

FA/341 ASTM E1077
FA/345 ASTM F788/788M
FA/346 ASTM F788/788M
FA/351 ASTM E112
FA/512 ASTM E407
FA/552 ASTM E3
FA/679 ASTM A574

Surface discontinuities of externally threaded fasteners

FA/357 ASTM F788/788M

NVLAP LAB CODE 200265-0

R & D Services, Inc.

2594 West Broad Street
P.O. Box 2400
Cookeville, TN 38502-2400
Contact: Mr. Ronald S. Graves
Phone: 931-372-8871
Fax: 931-525-3896
E-Mail: rdserv@usit.net
URL: http://rdservices.com

Thermal Insulation Materials

Accreditation Valid Through: September 30, 1999

NVLAP Code *Designation*

Corrosiveness

01/C01 ASTM C739 (Sec. 9)
01/C02 16 CFR-Part 1209.5

Flammability

01/F08 16 CFR-Part 1209.7
01/F10 ASTM C739 (Sec. 14)

Mass, Density, and Dimensional Stability

01/D02 ASTM C167
01/D26 16 CFR-Part 1209.4
01/D27 ASTM C739 (Sec. 8)

Related Material Properties

01/V05 ASTM C739 (Sec. 11)
01/V06 ASTM C739 (Sec. 15)

Thermal Resistance

01/T06 ASTM C518
01/T10 ASTM C687

NVLAP LAB CODE 200266-0

Aerospace Rivet Manufacturers Corp.

8535 Dice Road
Santa Fe Springs, CA 90670-2509
Contact: Mr. Caesar Bansil
Phone: 562-945-5456
Fax: 562-696-6398

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/403 ANSI/ASME B18.18.1M

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/271 MIL-STD-1312-8

Double shear of externally threaded fasteners

FA/257 MIL-STD-1312-13

Magnetic permeability

FA/214 ASTM A342 Test Method 3

Measurement of fastener coating thickness - microscopical method

FA/160 ASTM B487
FA/163 MIL-STD-1312-12

Microhardness of fasteners

FA/189 ASTM E384

Recess strength test in both the installation and removal directions

FA/476 MIL-STD-1312-25

Rockwell hardness of fasteners

FA/201 MIL-STD-1312-6

Salt spray testing of fasteners

FA/166 ASTM B117
FA/168 MIL-STD-1312-1

Single shear of externally threaded fasteners

FA/256 MIL-STD-1312-20

Water immersion method - test for anodic surface containment on corrosion resistant fasten

FA/756 MIL-STD-753 Test 100

Metallography

Determination of grain size of fasteners

FA/638 ASTM E112

Microscopic examination of fasteners by etching

FA/351 ASTM E112

Nondestructive Inspection	
Liquid penetrant inspection of fasteners	
FA/527	ASTM E1417
Magnetic particle inspection of fasteners	
FA/485	ASTM E1444

NVLAP LAB CODE 200267-0

Multifastener Laboratory

22100 Trolley Industrial Drive
Taylor, MI 48180
Contact: Ms. Michele Stawowy
Phone: 313-299-1178
Fax: 313-299-1190
E-Mail: stawowym@aol.com

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Mechanical and Physical Testing and Inspection	
Axial tensile strength of full-size threaded fasteners	
FA/265	ASTM A370 Sec. A3.2.1.4
FA/266	ASTM F606 Sec. 3.4.1-3.4.3
FA/267	ASTM F606M Sec. 3.4.1-3.4.3
FA/270	ISO 898-1 Sec. 8.2
FA/273	SAE J429
FA/274	SAE J1216
Prevailing torque	
FA/216	ANSI B18.16.1M
FA/218	ISO 2320
Proof load of full-size externally threaded fasteners	
FA/225	ASTM A370 Sec. A3.2.1.1-A3.2.1.3
FA/226	ASTM F606 Sec. 3.2.1-3.2.3
FA/228	ISO 898-1 Sec. 8.4
FA/229	SAE J429 Sec. 5.3
FA/230	SAE J1216 Sec. 3.3
FA/467	ASTM F606M Sec. 3.2.1-3.2.3
Proof load of internally threaded fasteners (nuts)	
FA/235	ASTM A370 Sec. A3.5.1
FA/236	ASTM F606 Sec. 4.2
FA/237	ASTM F606M Sec. 4.2
FA/239	ISO 898-2 Sec. 8.1
FA/240	ISO 898-6 Sec. 8.1
FA/241	SAE J995 Sec. 5.1
FA/242	SAE J1216 Sec 4.2
Rockwell hardness of fasteners	
FA/196	ASTM A370 Sec. 18
FA/197	ASTM E18
FA/200	ISO 6508
FA/202	SAE J417
Rockwell superficial hardness of fasteners	
FA/205	ASTM E18
FA/206	ASTM A370 Sec. 18
FA/208	ISO 1024
FA/210	SAE J417
Test for embrittlement of metallic coated externally threaded fasteners	
FA/179	ASTM F606 Sec. 7
FA/180	ASTM F606M Sec. 7

NVLAP LAB CODE 200268-0

The Monadnock Company

18301 East Arenth Avenue
City of Industry, CA 91748-1288
Contact: Mr. Belen Guevara
Phone: 818-964-6581
Fax: 818-965-5481

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of fasteners - bearing surface squareness	
FA/633	MIL-N-25027
External thread parameters - system 21	
FA/380	FED-STD-H28/20A
External thread parameters - system 22	
FA/382	FED-STD-H28/20A
External thread parameters - system 23	
FA/386	FED-STD-H28/20A
Internal thread parameters - system 21	
FA/392	FED-STD-H28/20A
Internal thread parameters - system 22	
FA/394	FED-STD-H28/20A
Internal thread parameters - system 23	
FA/398	FED-STD-H28/20A
Surface texture	
FA/439	ANSI/ASME B46.1
Mechanical and Physical Testing and Inspection	
Adhesion of metallic coatings on fasteners	
FA/779	BSS7225
Axial tensile strength of full-size threaded fasteners	
FA/271	MIL-STD-1312-8
FA/757	MIL-STD-1312-23
Compression load of compressible-washer-type direct tension indicators	
FA/778	BACW10CA
Copper sulfate test - test for free iron on the surface of corrosion resistant fasteners	
FA/636	MIL-STD-753 Test 102
Hydrogen embrittlement (stress durability) of internally threaded fasteners	
FA/178	MIL-STD-1312-14
FA/772	BACN10YD
FA/773	BACN10FX
FA/888	BACN11K
Magnetic permeability	
FA/214	ASTM A342 Test Method 3
Measurement of fastener coating thickness - eddy-current method	
FA/148	ASTM B244

Measurement of fastener coating thickness - microscopical method

FA/160 ASTM B487

Microhardness of fasteners

FA/193 MIL-STD-1312-6

Prevailing torque

FA/630 MIL-N-25027

Reusability test of self-locking internally threaded fasteners

FA/124 MIL-N-25027
FA/774 BPS-N-70

Rockwell hardness of fasteners

FA/201 MIL-STD-1312-6

Rockwell superficial hardness of fasteners

FA/209 MIL-STD-1312-6

Torque-out test

FA/133 MIL-N-25027
FA/775 BACN10YD
FA/776 BACN10VR
FA/777 BACN10FX
FA/887 BACN11K

Water immersion method - test for anodic surface containment on corrosion resistant fasten

FA/756 MIL-STD-753 Test 100

Wrench torque test of externally wrenched nuts of spline and hexagon and double hexagon (1

FA/141 MIL-N-25027

NVLAP LAB CODE 200271-0

Aerospace NYLOK - a subsidiary of the NYLOK Fastener Corporation

11 Thomas Road South
Hawthorne, NJ 07507-0651
Contact: Mr. Chet Radwan
Phone: 973-427-8555
Fax: 973-427-4723

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap

FA/805 MIL-DTL-18240
FA/806 MIL-F-18240

Mechanical and Physical Testing and Inspection

Prevailing torque

FA/217 IFI-100/107
FA/794 MIL-DTL-18240
FA/795 IFI 124
FA/796 MIL-F-18240
FA/797 IFI 125
FA/798 IFI 524
FA/833 IFI 525

Reusability test of self-locking internally threaded fasteners

FA/792 MIL-F-18240 (externally and internally threaded)
FA/793 MIL-DTL-18240 (externally and internally threaded)

NVLAP LAB CODE 200272-0

NYLOK Fastener Corporation

313 North Euclid Way
Anaheim, CA 92801-6738
Contact: Mr. Maynard Axvig
Phone: 714-635-3993
Fax: 714-635-9553

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap

FA/802 NYLOK TP-NW-5.0

External thread parameters - system 21

FA/379 ANSI/ASME B1.3M
FA/380 FED-STD-H28/20A

External thread parameters - system 22

FA/381 ANSI/ASME B1.3M
FA/382 FED-STD-H28/20A
FA/383 MIL-S-7742
FA/384 MIL-S-8879
FA/534 SAE AS 8879
FA/803 ASME B1.15

Internal thread parameters - system 21

FA/391 ANSI/ASME B1.3M
FA/392 FED-STD-H28/20A

Internal thread parameters - system 22

FA/393 ANSI/ASME B1.3M
FA/394 FED-STD-H28/20A
FA/395 MIL-S-7742
FA/396 MIL-S-8879
FA/537 SAE AS 8879
FA/804 ASME B1.15

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/266 ASTM F606 Sec. 3.4.1-3.4.3
FA/799 NASM 1312-8

Hydrogen embrittlement (stress durability) of externally threaded fasteners

FA/801 QQ-P-416

Hydrogen embrittlement (stress durability) of internally threaded fasteners

FA/800 QQ-P-416

Prevailing torque

FA/217 IFI-100/107
FA/794 MIL-DTL-18240
FA/795 IFI 124

FA/796 MIL-F-18240
FA/797 IFI 125
FA/798 IFI 524

Reusability test of self-locking internally threaded fasteners

FA/792 MIL-F-18240
FA/793 MIL-DTL-18240

NVLAP LAB CODE 200273-0

NYLOK Fastener Corporation

15260 Hallmark Drive
Macomb, MI 48042-4007
Contact: Mr. Glenn Graybill
Phone: 810-786-0100
Fax: 810-786-0498

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap

FA/802 NYLOK TP-NW-5.0

Mechanical and Physical Testing and Inspection

Prevailing torque

FA/216 ANSI B18.16.1M
FA/217 IFI-100/107
FA/557 DIN 267, Part 15
FA/795 IFI 124
FA/796 MIL-F-18240
FA/797 IFI 125
FA/798 IFI 524
FA/807 GM 6189P
FA/808 Ford ES382101-S100
FA/809 Ford ES-N800688-S100
FA/810 Ford ES-384103-S-A
FA/811 Ford WA 970
FA/812 Ford ES-F77U-9E926-AA
FA/813 Chrysler PF-5077
FA/814 Chrysler PF-5144
FA/815 Chrysler PF-5461
FA/816 Chrysler PF-5683
FA/817 Chrysler PF-6157
FA/818 Chrysler PF-6158
FA/819 DIN 267, Part 27
FA/820 Navistar 0810
FA/821 GM TES-113
FA/822 Bendix W1287
FA/823 Mack Trucks 10AMS1
FA/824 Mack Trucks 3AXS5
FA/825 Mack Trucks 6AXS5
FA/826 Allied Signal WI-504
FA/827 GM 6175M
FA/828 Ford ES-20010-S100
FA/829 Ford ES-20007-S100
FA/830 Ford WX 200
FA/831 Ford WSS-M11P45-A1
FA/832 Ford ESS-M11P24-A1
FA/833 IFI 525
FA/834 Rockwell International Q-29
FA/835 Ford ES-N804199-S192
FA/836 Ford WE 950
FA/837 Ford ES-21002-S100
FA/838 Ford ES-21006-S100
FA/839 Ford ES-21000-S100
FA/840 Chrysler MS-CD914
FA/841 GM 6076M
FA/842 Chrysler PS-8542

Torque-tension of full-size threaded fasteners

FA/307 MIL-STD-1312-15
FA/308 SAE J174

NVLAP LAB CODE 200274-0

Kyowa Kogyosyo Co., Ltd. Test Laboratory

1-57, Kogyo-Danchi
Komatsu City, Ishikawa
JAPAN
Contact: Mr. Mataichi Fukuda
Phone: 81-761-21-0531
Fax: 81-761-21-0533

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of ISO grade A and B fasteners

FA/589 JIS B1071

Dimensions of fasteners - bearing surface squareness

FA/649 JIS B1071

Dimensions of fasteners - straightness

FA/648 JIS B1071

External thread parameters - system 21

FA/647 JIS B1071

Surface texture

FA/650 JIS B1071

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/266 ASTM F606 Sec. 3.4.1-3.4.3
FA/574 JIS B1051 Sec. 4.2.2

Charpy impact (u-notch) testing

FA/845 JIS Z2242

Hardness preparation

FA/482 ASTM F606

Measurement of fastener coating thickness - magnetic methods

FA/596 JIS H8501

Microhardness of fasteners

FA/620 JIS Z2244
FA/642 JIS B1051 Sec. 4.2.5

Proof load of full-size externally threaded fasteners

FA/573 JIS B1051 Sec. 4.2.4

Rockwell hardness of fasteners

FA/197	ASTM E18
FA/572	JIS Z2245
FA/707	JIS B1051 Sec. 4.2.5

Tension testing of machined specimens from externally threaded fasteners

FA/581	JIS B1051 Sec. 4.2.1
FA/582	JIS Z2241

Wedge tensile strength of full-size threaded fasteners

FA/290	ASTM F606 Sec. 3.5
FA/575	JIS B1051 Sec. 4.2.3

Metallography

Decarburization and case depth measurement in fasteners

FA/645	JIS B1051

Surface discontinuities of externally threaded fasteners

FA/603	JIS B1043

NVLAP LAB CODE 200275-0

NYLOK Fastener Corporation - Chicago Testing Laboratory

6465 Proesel Avenue
Lincolnwood, IL 60645
Contact: Mr. Peter Beck
Phone: 800-446-5956
Fax: 847-674-1269

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*

Dimensional Inspection

Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap

FA/850	NYLOK TP-NC-5.0

Mechanical and Physical Testing and Inspection

Prevailing torque

FA/846	NYLOK TP-NC-1.0
FA/847	NYLOK TP-NC-2.0
FA/848	NYLOK TP-NC-3.0
FA/849	NYLOK TP-NC-4.0

NVLAP LAB CODE 200276-0

Yamaha Motor Metal Testing Laboratory Fasteners and Metals

2500 Shingai
Iwata Shizuoka 438-8501
JAPAN
Contact: Mr. Shinobu Mizukoshi
Phone: 81-538-37-4031
Fax: 81-538-37-4297
E-Mail: mizukoshi.shinobu@ccgw.yamaha-motor.co.jp

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*

Chemical Analysis

Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen

FA/586	JIS G1211
FA/587	JIS G1215

Optical emission spectrochemical analysis

FA/588	JIS G1253

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/607	JIS B1071
FA/856	JIS B1251
FA/857	JIS B1256

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/574	JIS B1051 Sec. 4.2.2

CASS test (copper-accelerated acetic acid-salt spray test) of fasteners

FA/599	JIS H8502

Compression load of compressible-washer-type direct tension indicators

FA/858	JIS B1251

Measurement of fastener coating thickness - X-ray methods

FA/641	JIS H8501

Measurement of fastener coating thickness - microscopical method

FA/640	JIS H8501

Microhardness of fasteners

FA/620	JIS Z2244
FA/642	JIS B1051 Sec. 4.2.5

Proof load of full-size externally threaded fasteners

FA/573	JIS B1051 Sec. 4.2.4

Rockwell hardness of fasteners

FA/572	JIS Z2245
FA/616	JIS B1051 Sec. 4.3

Salt spray testing of fasteners

FA/569	JIS Z2371

Twist test of lock washers

FA/678	JIS B1251

Wedge tensile strength of full-size threaded fasteners

FA/575	JIS B1051 Sec. 4.2.3

Metallography

Decarburization and case depth measurement in fasteners

FA/645	JIS B1051

Surface discontinuities of externally threaded fasteners

FA/603	JIS B1043
FA/646	JIS B1041

NVLAP LAB CODE 200277-0

Vulcan Rivet and Bolt Corporation

1020 Pinson Valley Parkway
P.O. Box 170129
Birmingham, AL 35217-0129
Contact: Mr. Anil P. Agarwal
Phone: 205-841-2711
Fax: 205-841-2722

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Mechanical and Physical Testing and Inspection	
Axial tensile strength of full-size threaded fasteners	
FA/266	ASTM F606 Sec. 3.4.1-3.4.3
FA/267	ASTM F606M Sec. 3.4.1-3.4.3
FA/273	SAE J429
Rockwell hardness of fasteners	
FA/196	ASTM A370 Sec. 18
Single shear of externally threaded fasteners	
FA/255	ASTM F606
Tension testing of machined specimens from externally threaded fasteners	
FA/279	ASTM F606 Sec. 3.6
FA/280	ASTM F606M Sec. 3.6
FA/283	SAE J429
Wedge tensile strength of full-size threaded fasteners	
FA/290	ASTM F606 Sec. 3.5
FA/291	ASTM F606M Sec. 3.5
FA/468	SAE J429 Sec. 5.5

NVLAP LAB CODE 200278-0

Casey Products, Inc.

1955 University Lane
Lisle, IL 60532-4149
Contact: Mr. Michael B. Connelly
Phone: 630-960-3360
Fax: 630-960-3419

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of ISO grade A and B fasteners	
FA/407	ISO 3269
FA/408	ISO 4759-1
Dimensions of ISO grade C fasteners	
FA/409	ISO 3269
FA/410	ISO 4759-1
Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets	
FA/411	ANSI/ASME B18.3
FA/412	ANSI/ASME B18.3.1M
FA/413	ANSI/ASME B18.3.3M
FA/414	ANSI/ASME B18.3.4M
FA/415	ANSI/ASME B18.3.5M
FA/416	ANSI/ASME B18.3.6M
Dimensions of fasteners - straightness	
FA/423	ANSI/ASME B18.2.1
FA/424	ANSI/ASME B18.2.3.1M
FA/425	ANSI/ASME B18.2.3.2M
FA/426	ANSI/ASME B18.2.3.3M
FA/427	ANSI/ASME B18.2.3.4M
FA/428	ANSI/ASME B18.2.3.5M
FA/429	ANSI/ASME B18.2.3.6M
FA/433	ANSI/ASME B18.5.2.2M
Dimensions of general purpose fasteners and high-volume machine assembly fasteners	
FA/403	ANSI/ASME B18.18.1M
FA/404	ANSI/ASME B18.18.2M
FA/486	MIL-STD-120 (W/ Notice dtd 9 SEP 63)
FA/870	ANSI/ASME B1.16M
FA/871	ANSI/ASME B1.2
Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap	
FA/405	ANSI/ASME B18.18.3M
FA/406	ANSI/ASME B18.18.4M
External thread parameters - ISO	
FA/390	ISO 1502
External thread parameters - system 21	
FA/379	ANSI/ASME B1.3M
External thread parameters - system 22	
FA/381	ANSI/ASME B1.3M
Internal thread parameters - ISO	
FA/402	ISO 1502
Internal thread parameters - system 21	
FA/391	ANSI/ASME B1.3M
Internal thread parameters - system 22	
FA/393	ANSI/ASME B1.3M
Mechanical and Physical Testing and Inspection	
Axial tensile strength of full-size threaded fasteners	
FA/265	ASTM A370 Sec. A3.2.1.4
FA/266	ASTM F606 Sec. 3.4.1-3.4.3
FA/267	ASTM F606M Sec. 3.4.1-3.4.3
FA/270	ISO 898-1 Sec. 8.2
FA/273	SAE J429
FA/274	SAE J1216
Hardness preparation	
FA/464	ASTM F606M
FA/482	ASTM F606
Measurement of fastener coating thickness - eddy-current method	
FA/149	ASTM E376
Measurement of fastener coating thickness - magnetic methods	
FA/155	ASTM E376
Microhardness of fasteners	
FA/189	ASTM E384
Prevailing torque	
FA/217	IFI-100/107

Proof load of full-size externally threaded fasteners

FA/225	ASTM A370 Sec. A3.2.1.1-A3.2.1.3
FA/226	ASTM F606 Sec. 3.2.1-3.2.3
FA/228	ISO 898-1 Sec. 8.4
FA/229	SAE J429 Sec. 5.3
FA/467	ASTM F606M Sec. 3.2.1-3.2.3
FA/577	SAE J1216 Sec. 3.3

Proof load of internally threaded fasteners (nuts)

FA/235	ASTM A370 Sec. A3.5.1
FA/236	ASTM F606 Sec. 4.2
FA/237	ASTM F606M Sec. 4.2
FA/239	ISO 898-2 Sec. 8.1
FA/241	SAE J995 Sec. 5.1

Rockwell hardness of fasteners

FA/196	ASTM A370 Sec. 18
FA/197	ASTM E18

Rockwell superficial hardness of fasteners

FA/205	ASTM E18
FA/206	ASTM A370 Sec. 18

Test for embrittlement of metallic coated externally threaded fasteners

FA/179	ASTM F606 Sec. 7
FA/180	ASTM F606M Sec. 7

Total extension at fracture of externally threaded fasteners

FA/285	ASTM F606 Sec. 3.7
FA/286	ASTM F606M Sec. 3.7

Wedge tensile strength of full-size threaded fasteners

FA/289	ASTM A370
FA/290	ASTM F606 Sec. 3.5
FA/291	ASTM F606M Sec. 3.5
FA/294	ISO 898-1 Sec. 8.5
FA/468	SAE J429 Sec. 5.5
FA/469	SAE J1216 Sec. 3.6

Yield strength of full-size externally threaded fasteners

FA/298	ASTM F606 Sec. 3.2.4
FA/300	ASTM F606M Sec. 3.2.4

Metallography

Decarburization and case depth measurement in fasteners

FA/323	ASTM E1077
FA/324	ISO 898-1
FA/325	ISO 898-5
FA/328	SAE J121
FA/329	SAE J419
FA/330	SAE J423
FA/483	ASTM A574 Sec. 12
FA/519	ASTM A574M
FA/520	ASTM F835
FA/758	SAE J121M
FA/866	ASTM F835M
FA/867	ASTM F912
FA/868	ASTM F912M

Determination of grain size of fasteners

FA/638	ASTM E112

Macroscopic examination of fasteners by etching

FA/484	ASTM E381
FA/511	ASTM E340

Microscopic examination of fasteners by etching

FA/512	ASTM E407

Surface discontinuities of externally threaded fasteners

FA/357	ASTM F788/788M
FA/359	ISO 6157-1
FA/360	ISO 6157-3
FA/361	SAE J123
FA/362	SAE J1061
FA/859	ASTM A574
FA/860	ASTM A574M
FA/861	ASTM F835
FA/862	ASTM F835M
FA/863	ASTM F912
FA/864	ASTM F912M

Surface discontinuities of internally threaded fasteners

FA/365	SAE J122
FA/727	ISO 6157-2
FA/865	ASTM F812/F812M

NVLAP LAB CODE 200279-0

Federal Manufacturing Corp.

9825 Desoto Avenue
Chatsworth, CA 91311
Contact: Mr. Drew Haney
Phone: 818-341-9825
Fax: 818-341-9913

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code *Designation*

Dimensional Inspection

External thread parameters - system 22

FA/381	ANSI/ASME B1.3M
FA/382	FED-STD-H28/20

External thread parameters - system 23

FA/385	ANSI/ASME B1.3M
FA/386	FED-STD-H28/20
FA/388	MIL-S-8879

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/799	NASM 1312-8

Double shear of externally threaded fasteners

FA/880	NASM 1312-13

Fatigue of full-size threaded fasteners

FA/876	NASM 1312-11

Magnetic permeability

FA/214	ASTM A342 Test Method 3

Measurement of fastener coating thickness - magnetic methods

FB/1003	NASM 1312-12

Microhardness of fasteners

FA/189	ASTM E384
FA/877	NASM 1312-6

Recess strength test in both the installation and removal directions

FA/886 NASM 1312-25

Rockwell hardness of fasteners

FA/878 NASM 1312-6

Rockwell superficial hardness of fasteners

FB/1004 NASM 1312-6

Wedge tensile strength of full-size threaded fasteners

FB/1005 NASM 1312-8

Metallography

Determination of grain size of fasteners

FA/331 ASTM E112

Microscopic examination of fasteners by etching

FA/512 ASTM E407

NVLAP LAB CODE 200280-0

Super Cheng Industrial Testing Laboratory

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Kaohsiung, Kangshan 82005
TAIWAN
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E-Mail: supcheng@msl.hinet.net

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of fasteners - bearing surface squareness

FA/746 ASME/ANSI B18.2.2
FA/761 JIS B1196

Dimensions of fasteners - flange screw heads and flange nuts

FA/566 IFI D21 p. D21
FA/764 DIN 6923

Dimensions of fasteners - gaging for slotted nuts

FA/417 ANSI/ASME B18.2.2
FA/763 DIN 935, Part 3

Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets

FA/843 ASME/ANSI B18.2.2

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/404 ANSI/ASME B18.18.2M
FA/844 DIN Handbook 140

Internal thread parameters - SAE fastener with MJ metric screw threads

FA/762 ANSI/ASME B1.3M

Mechanical and Physical Testing and Inspection

Hardness preparation

FA/464 ASTM F606M
FA/482 ASTM F606

Measurement of fastener coating thickness - X-ray methods

FA/760 ASTM A754/A754M

Measurement of fastener coating thickness - coulometric method

FA/567 ASTM B504

Prevailing torque

FA/217 IFI-100/107

Proof load of internally threaded fasteners (nuts)

FA/236 ASTM F606 Sec. 4.2
FA/237 ASTM F606M Sec. 4.2
FA/241 SAE J995 Sec. 5.1

Rockwell hardness of fasteners

FA/197 ASTM E18

Rockwell superficial hardness of fasteners

FA/205 ASTM E18

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/492 ASTM E92

Metallography

Decarburization and case depth measurement in fasteners

FA/324 ISO 898-1
FA/328 SAE J121
FA/521 ASTM E384

Surface discontinuities of externally threaded fasteners

FA/357 ASTM F788
FA/358 ASTM F788M

Surface discontinuities of internally threaded fasteners

FA/363 ASTM F812
FA/364 ASTM F812M

NVLAP LAB CODE 200281-0

Fujitsu Evaluation Engineering Laboratory

140 Miyamoto
Numazu, Shizuoka-Pref. 410-0396
JAPAN
Contact: Mr. Yoshiyuki Okita
Phone: 81-559-24-7209
Fax: 81-559-24-6183
E-Mail: okita@psl.fujitsu.co.jp

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code *Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51 AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b Radiated Emissions

(See 'How To Use This Directory' on page 7.)

International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200282-0

Electronics Test Centre

302 Legget Drive, Unit 100
Kanata, Ont. K2K 1Y5
CANADA
Contact: Mr. Dave Scribailo
Phone: 613-599-6800
Fax: 613-599-7614
E-Mail: daves@mpb-technologies.com

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200283-0

Duro-Test Corporation

185 Scoles Avenue
Clifton, NJ 07012
Contact: Mr. Denis McNamee
Phone: 973-472-1900
Fax: 973-472-5220
E-Mail: dmcnamee@duro-test.com

Energy Efficient Lighting Products

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Color Measurements	
22/C01	IES LM-58
Electrical Measurements	
22/E01	IES LM-9
22/E02	IES LM-45
22/E03	IES LM-51
22/E04	IES LM-66
Photometric Measurements	
22/P01a	IES LM-9 (Total Flux)
22/P02a	IES LM-20 (Total Flux)
22/P03a	IES LM-45 (Total Flux)
22/P04a	IES LM-51 (Total Flux)
22/P05a	IES LM-66 (Total Flux)

NVLAP LAB CODE 200285-0

Sony Atsugi EMC Site

6-7-35, Kitashinagawa
Shinagawa, Tokyo, 141-0001
JAPAN
Contact: Mr. Noriyoshi Iwasaki
Phone: 81-3-5448-4162
Fax: 81-3-5448-2389
E-Mail: noriyoshi@apl.sony.co.jp

FCC Test Methods

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200286-0

Fwu Kuang Enterprises Co., Ltd.

No. 239, Lane 202, Chung Cheng W. Road,
Erh-Hang Tsum, Jen-Te Hsiang
Tainan Hsien
TAIWAN
Contact: Mr. Zhi Ming Wang
Phone: 886-6-2625343
Fax: 886-6-2665439

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
External thread parameters - ISO	
FA/390	ISO 1502
External thread parameters - system 21	
FA/379	ANSI/ASME B1.3M

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/266	ASTM F606 Sec. 3.4.1-3.4.3
FA/267	ASTM F606M Sec. 3.4.1-3.4.3

Measurement of fastener coating thickness - coulometric method

FA/567	ASTM B504

Microhardness of fasteners

FA/189	ASTM E384

Proof load of full-size externally threaded fasteners

FA/226	ASTM F606 Sec. 3.2.1-3.2.3
FA/467	ASTM F606M Sec. 3.2.1-3.2.3

Rockwell hardness of fasteners

FA/197	ASTM E18

Rockwell superficial hardness of fasteners

FA/205	ASTM E18

Torque-tension of full-size threaded fasteners

FA/938	ASTM F912
FA/939	ASTM F912M

Total extension at fracture of externally threaded fasteners

FA/285	ASTM F606 Sec. 3.7
FA/286	ASTM F606M Sec. 3.7

Wedge tensile strength of full-size threaded fasteners

FA/290	ASTM F606 Sec. 3.5
FA/291	ASTM F606M Sec. 3.5

Yield strength of full-size externally threaded fasteners

FA/298	ASTM F606 Sec. 3.2.4
FA/300	ASTM F606M Sec. 3.2.4

Metallography

Decarburization and case depth measurement in fasteners

FA/325	ISO 898-5
FA/867	ASTM F912

Surface discontinuities of externally threaded fasteners

FA/357	ASTM F788/788M

NVLAP LAB CODE 200287-0

Small IAC Test Laboratory

107 Park St. N
Peterborough, ON K9J-7B5
CANADA
Contact: Mr. Harold Peltzer
Phone: 705-748-7343
Fax: 705-748-7677
E-Mail: Peltzer.harold@mlink.motors.ge.com

Efficiency of Electric Motors

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
24/M01	IEEE 112, Method B

NVLAP LAB CODE 200288-0

Fong Prean Industrial Co., Ltd.

No. 6 Kung-Wei St. Tzu Hsin T'Sun
Tzu Kuan Hsiang
Kaohsiung Hsien
TAIWAN
Contact: Mr. Chang San Tien
Phone: 886-7-6170526
Fax: 886-7-6103160

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/854	ANSI/ASME B18.6.4
FA/855	ISO 1479

Mechanical and Physical Testing and Inspection

Drill-drive test

FA/247	SAE J78
FA/851	DIN 7504

Hardness preparation

FA/464	ASTM F606M
FA/482	ASTM F606

Measurement of fastener coating thickness - X-ray methods

FA/760	ASTM A754/A754M

Microhardness of fasteners

FA/189	ASTM E384

Rockwell hardness of fasteners

FA/197	ASTM E18

Rockwell superficial hardness of fasteners

FA/205	ASTM E18

Salt spray testing of fasteners

FA/166	ASTM B117

Torsional strength test of thread rolling and self-drilling tappings screws

FA/751	SAE J933
FA/852	ISO 2702
FA/853	DIN 7504

Metallography

Decarburization and case depth measurement in fasteners

FA/330	SAE J423
FA/562	ASTM G79

Surface discontinuities of externally threaded fasteners

FA/357	ASTM F788/788M
FA/361	SAE J123

NVLAP LAB CODE 200289-0

Craig Environmental Services, Inc.

5439 Harding Highway
P.O. Box 427
Mays Landing, NJ 08330
Contact: Ms. Hollie A. Madamba
Phone: 609-625-4200
Fax: 609-625-1798

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 200290-0

ATC Associates Inc.

11356 Mathis Ave.
Dallas, TX 75229-3157
Contact: Ms. Cynthia E. Watkins
Phone: 972-556-2205
Fax: 972-556-1753

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 200291-0

NGC Testing Services, National Gypsum Research Center

1650 Military Road
Buffalo, NY 14217-1198
Contact: Mr. Robert J. Menchetti
Phone: 716-873-9750
Fax: 716-873-9753
E-Mail: ngctest@buffnet.net
URL: http://www.national-gypsum.com/testing/index.html

Acoustical Testing Services

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P06	ASTM E90 (ISO 140, Part 3)
08/P30	ASTM E1408
08/P34	ASTM E1414 (AMA-1-II-67)(ISO 140, Part 9)

NVLAP LAB CODE 200292-0

BCAG Fastener Quality Test Lab Everett Site

P.O. Box 370, MS 04-02
Seattle, WA 98124-2207
Contact: Mr. Eugene J. Brown
Phone: 425-342-3888
Fax: 425-266-4673
E-Mail: eugene.j.brown@boeing.com

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

NVLAP Code | *Designation*

Chemical Analysis

Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen

FA/472	ASTM E1447

Optical emission spectrochemical analysis

FA/456	ASTM E327
FA/457	ASTM E415
FA/458	ASTM E607
FA/459	ASTM E1086
FA/460	ASTM E1251

Spot test analysis

FB/1076	D1-8018-2

Dimensional Inspection

Dimensions of fasteners - bearing surface squareness

FA/911	BPS-N-70

Dimensions of fasteners - gaging for slotted nuts

FA/417	ANSI/ASME B18.2.2
FA/418	ANSI/ASME B18.2.4.3M

Dimensions of fasteners - straightness

FA/423	ANSI/ASME B18.2.1

Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap

FA/405	ANSI/ASME B18.18.3M
FA/406	ANSI/ASME B18.18.4M
FB/1060	BPS-F-69
FB/1061	BPS-F-76
FB/1062	BPS-F-67
FB/1063	D-11805
FB/1064	BPS-N-70
FB/1065	BPS-F-68

External thread parameters - system 22

FA/381	ANSI/ASME B1.3M
FA/382	FED-STD-H28/20
FA/383	MIL-S-7742
FA/384	MIL-S-8879

Internal thread parameters - system 21

FA/391	ANSI/ASME B1.3M
FA/392	FED-STD-H28/20
FA/529	MIL-S-7742

Surface texture

FA/439	ANSI/ASME B46.1

Mechanical and Physical Testing and Inspection

Adhesion of metallic coatings on fasteners

FA/532	BMS 10-85M Sec. 8.2

Axial tensile strength of full-size threaded fasteners

FA/271	MIL-STD-1312-8
FA/799	NASM 1312-8
FB/1067	D2-2860

Double shear of externally threaded fasteners

FA/257	MIL-STD-1312-13
FA/880	NASM 1312-13
FB/1066	D2-2860
FB/1070	NAS 498

Fatigue of full-size threaded fasteners

FA/183	MIL-STD-1312-11
FA/184	NAS 1069
FA/876	NASM 1312-11

(See 'How To Use This Directory' on page 7.)

FB/1038 D2-2860

Hardness preparation

FB/1071 NAS 498

Hydrogen embrittlement (stress durability) of externally threaded fasteners

FA/176 MIL-STD-1312-5
FA/801 QQ-P-416
FA/875 NASM 1312-5

Hydrogen embrittlement (stress durability) of internally threaded fasteners

FA/178 MIL-STD-1312-14
FA/800 QQ-P-416
FB/1033 NASM 1312-14

Intergranular corrosion susceptibility of austentic stainles steel fasteners - oxalic acid

FA/174 ASTM A262 Sec. 3-7, Practice A

Measurement of fastener coating thickness - dimensional change method

FA/495 MIL-STD-1312-12
FA/874 NASM 1312-12

Measurement of fastener coating thickness - microscopical method

FA/160 ASTM B487
FA/163 MIL-STD-1312-12
FA/873 NASM 1312-12

Microhardness of fasteners

FA/189 ASTM E384

Prevailing torque

FA/630 MIL-N-25027
FA/899 BPS-N-70
FA/902 NAS 3350

Proof load of full-size externally threaded fasteners

FA/691 MIL-STD-1312-8
FB/1037 NASM 1312-8
FB/1041 D2-2860

Proof load of internally threaded fasteners (nuts)

FB/1039 MIL-STD-1312-8
FB/1040 NASM 1312-8
FB/1042 D2-2860

Push out test of floating plate nuts, gang channel nuts, and anchor nuts

FA/116 MIL-N-25027
FA/891 BPS-N-70

Recess strength test in both the installation and removal directions

FA/886 NASM 1312-25

Reusability test of self-locking internally threaded fasteners

FA/124 MIL-N-25027
FA/125 NAS 3350
FA/774 BPS-N-70

Rockwell hardness of fasteners

FA/196 ASTM A370 Sec. 18
FA/197 ASTM E18
FA/201 MIL-STD-1312-6
FA/878 NASM 1312-6
FB/1072 BAC 5650

Rockwell superficial hardness of fasteners

FA/205 ASTM E18
FA/206 ASTM A370 Sec. 18
FA/209 MIL-STD-1312-6
FB/1035 NASM 1312-6

Salt spray testing of fasteners

FA/168 MIL-STD-1312-1
FB/1032 NASM 1312-1

Tension testing of machined specimens from externally threaded fasteners

FA/475 ASTM E8
FB/1043 ASTM B557

Test for embrittlement of metallic coated externally threaded fasteners

FA/525 MIL-STD-1312-5
FB/1034 NASM 1312-5

Torque-out test

FA/133 MIL-N-25027
FB/1031 BPS-N-70

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/671 MIL-STD-1312-6
FB/1036 NASM 1312-6

Wedge tensile strength of full-size threaded fasteners

FA/295 MIL-STD-1312-8
FB/1044 NASM 1312-8
FB/1069 D2-2860

Wrench torque test of externally wrenched nuts of spline and hexagon and double hexagon (1

FA/141 MIL-N-25027
FA/142 NAS 3350
FA/893 BPS-N-70

Yield strength of full-size externally threaded fasteners

FA/303 MIL-STD-1312-8
FB/1045 NASM 1312-8
FB/1068 D2-2860

Metallography

Decarburization and case depth measurement in fasteners

FA/323 ASTM E1077
FA/904 BPS-N-70
FB/1046 BPS-F-76
FB/1047 BPS-F-67
FB/1048 NAS 498
FB/1073 BPS-F-46

Determination of grain size of fasteners

FA/331 ASTM E112

Macroscopic examination of fasteners by etching

FA/511 ASTM E340

Microscopic examination of fasteners by etching

FA/512 ASTM E407

Surface discontinuities of externally threaded fasteners

FA/357 ASTM F788/788M
FA/859 ASTM A574
FB/1049 NAS 4002
FB/1050 NAS 4003
FB/1051 NAS 4004
FB/1052 BPS-F-67

FB/1053	BPS-F-69
FB/1054	BPS-F-68
FB/1055	BPS-F-76
FB/1056	NAS 498
FB/1057	FF-S-86

Surface discontinuities of internally threaded fasteners

FA/907	BPS-N-70

Nondestructive Inspection

Liquid penetrant inspection of fasteners

FA/527	ASTM E1417
FB/1059	MIL-I-25135
FB/1074	BAC 5423

Magnetic particle inspection of fasteners

FA/485	ASTM E1444
FB/1075	BAC 5424

NVLAP LAB CODE 200293-0

EMSL Analytical, Inc.

10766 Rhode Island Avenue
Beltsville, MD 20705
Contact: Mr. Joseph Centifonti
Phone: 301-937-5700
Fax: 301-937-5702

URL: http://www.emsl.com

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: December 31, 1999

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200294-0

Micron Environmental Labs

292 E. Foothill Blvd., Suite B
Arcadia, CA 91006
Contact: Mr. Daniel Gamez
Phone: 626-357-8627
Fax: 626-256-9017

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200296-0

Okawa Laboratory

6357-1 Oba, Omiya-cho
Naka-gun, Ibaraki-ken 319-21
JAPAN
Contact: Mr. Katsuyoshi Okawa
Phone: 81-2955-3-0111
Fax: 81-2955-3-5290

Fasteners & Metals
Accreditation Valid Through: June 30, 1999

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

NVLAP Code	*Designation*
FA/607	JIS B1071

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/574	JIS B1051 Sec. 4.2.2

Measurement of fastener coating thickness - magnetic methods

FA/596	JIS H8501

Proof load of full-size externally threaded fasteners

FA/573	JIS B1051 Sec. 4.2.4

Rockwell hardness of fasteners

FA/572	JIS Z2245
FA/616	JIS B1051 Sec. 4.3
FA/707	JIS B1051 Sec. 4.2.5

Salt spray testing of fasteners

FA/569	JIS Z2371

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/571	JIS Z2244
FA/643	JIS B1051 Sec. 4.2.5

Metallography

Decarburization and case depth measurement in fasteners

FA/645	JIS B1051

Surface discontinuities of externally threaded fasteners

FA/646	JIS B1041

NVLAP LAB CODE 200297-0

Intertek Testing Services NA Inc.

27611 La Paz Road, Suite C
Laguna Niguel, CA 92677
Contact: Mr. Simon Rate
Phone: 714-448-4100
Fax: 714-448-4111

FCC Test Methods
Accreditation Valid Through: June 30, 1999

Australian Standards referred to by clauses in AUSTEL Technical Standards

NVLAP Code	*Designation*
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200298-0

SPS Technologies Aerospace Product Division

2701 S. Harbor Boulevard
Santa Ana, CA 92702-1259
Contact: Mr. Rob Dewitz
Phone: 714-850-3664
Fax: 714-850-3605

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code *Designation*

Dimensional Inspection

Dimensions of fasteners - bearing surface squareness

FA/633 MIL-N-25027

Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets

FA/411 ANSI/ASME B18.3
FA/540 MIL-STD-33787
FA/634 MIL-STD-21132
FA/635 SAE AS 870

Dimensions of fasteners - straightness

FA/423 ANSI/ASME B18.2.1

External thread parameters - system 21

FA/379 ANSI/ASME B1.3M
FA/380 FED-STD-H28/20
FA/628 MIL-S-8879

External thread parameters - system 22

FA/381 ANSI/ASME B1.3M
FA/382 FED-STD-H28/20
FA/384 MIL-S-8879

External thread parameters - system 23

FA/385 ANSI/ASME B1.3M
FA/386 FED-STD-H28/20
FA/388 MIL-S-8879

Internal thread parameters - system 21

FA/391 ANSI/ASME B1.3M
FA/392 FED-STD-H28/20
FA/629 MIL-S-8879

Internal thread parameters - system 22

FA/393 ANSI/ASME B1.3M
FA/394 FED-STD-H28/20
FA/537 SAE AS 8879

Surface texture

FA/439 ANSI/ASME B46.1

Mechanical and Physical Testing and Inspection

Adhesion of metallic coatings on fasteners

FA/143 ASTM B571

Axial tensile strength of full-size threaded fasteners

FA/265 ASTM A370 Sec. A3.2.1.4
FA/266 ASTM F606 Sec. 3.4.1-3.4.3
FA/271 MIL-STD-1312-8

Double shear of externally threaded fasteners

FA/257 MIL-STD-1312-13

Hardness preparation

FA/482 ASTM F606

Humidity testing of fasteners

FA/169 MIL-STD-753 Test Method 101
FA/473 MIL-STD-1312-3
FA/923 ASTM A967

Hydrogen embrittlement (stress durability) of externally threaded fasteners

FA/176 MIL-STD-1312-5
FA/924 ASTM F606

Hydrogen embrittlement (stress durability) of internally threaded fasteners

FA/178 MIL-STD-1312-14

Magnetic permeability

FA/214 ASTM A342 Test Method 3

Measurement of fastener coating thickness - X-ray methods

FA/556 ASTM B568

Measurement of fastener coating thickness - magnetic methods

FA/153 ASTM B499
FA/159 MIL-STD-1312-12

Measurement of fastener coating thickness - microscopical method

FA/160 ASTM B487
FA/163 MIL-STD-1312-12

Microhardness of fasteners

FA/189 ASTM E384
FA/193 MIL-STD-1312-6

Permanent set test of self-locking nuts

FA/109 MIL-N-25027

Prevailing torque

FA/630 MIL-N-25027

Proof load of full-size externally threaded fasteners

FA/226 ASTM F606 Sec. 3.2.1-3.2.3

Proof load of internally threaded fasteners (nuts)

FA/236 ASTM F606 Sec. 4.2

Push out test of floating plate nuts, gang channel nuts, and anchor nuts

FA/926 SPS 316

Recess strength test in both the installation and removal directions

FA/476 MIL-STD-1312-25

Reusability test of self-locking internally threaded fasteners

FA/124 MIL-N-25027
FA/522 MIL-STD-1312-31

Rockwell hardness of fasteners

FA/197 ASTM E18
FA/201 MIL-STD-1312-6

Rockwell superficial hardness of fasteners

FA/205 ASTM E18
FA/209 MIL-STD-1312-6

Room temperature of three cycles test of floating plate nuts, gang channel nuts and anchor

FA/927 SPS 380

Salt spray testing of fasteners	
FA/166	ASTM B117
FA/168	MIL-STD-1312-1
Single shear of externally threaded fasteners	
FA/255	ASTM F606
FA/256	MIL-STD-1312-20
FA/925	ASTM F606M
Stress rupture of fasteners	
FA/260	ASTM E139
FA/261	ASTM E292
FA/262	MIL-STD-1312-10
Tension testing of machined specimens from externally threaded fasteners	
FA/278	ASTM A370
FA/279	ASTM F606 Sec. 3.6
FA/475	ASTM E8
Test for embrittlement of metallic coated externally threaded fasteners	
FA/179	ASTM F606 Sec. 7
FA/525	MIL-STD-1312-5
Torque-out test	
FA/133	MIL-N-25027
FA/523	MIL-STD-1312-31
Torque-tension of full-size threaded fasteners	
FA/307	MIL-STD-1312-15
Vibration of full-size threaded fasteners	
FA/311	MIL-STD-1312-7
FA/631	MIL-N-25027
Wedge tensile strength of full-size threaded fasteners	
FA/289	ASTM A370
FA/290	ASTM F606 Sec. 3.5
Yield strength of full-size externally threaded fasteners	
FA/298	ASTM F606 Sec. 3.2.4
FA/299	ASTM A370 Sec. A3.2.1.3(a)

Metallography

Decarburization and case depth measurement in fasteners	
FA/323	ASTM E1077
Determination of grain size of fasteners	
FA/638	ASTM E112
Macroscopic examination of fasteners by etching	
FA/511	ASTM E340
Microscopic examination of fasteners by etching	
FA/512	ASTM E407
Surface discontinuities of externally threaded fasteners	
FA/357	ASTM F788/788M
Surface discontinuities of internally threaded fasteners	
FA/865	ASTM F812/F812M

Nondestructive Inspection

Liquid penetrant inspection of fasteners	
FA/371	MIL-STD-6866
FA/527	ASTM E1417
Magnetic particle inspection of fasteners	
FA/485	ASTM E1444

NVLAP LAB CODE 200299-0

Okai Iron Works Co., Ltd.

3-12-41 Tsuruhara
Izumisano Osaka 598-0071
JAPAN
Contact: Mr. Yasuhiro Okai
Phone: 0724-63-6101
Fax: 0724-63-6228

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

Dimensional Inspection

NVLAP Code	*Designation*
Dimensions of ISO grade A and B fasteners	
FA/408	ISO 4759-1
FA/930	ISO 4759-3
Dimensions of ISO grade C fasteners	
FA/410	ISO 4759-1
FA/931	ISO 4759-3
Dimensions of fasteners - bearing surface squareness	
FA/936	ISO 4759-1
Dimensions of fasteners - flange screw heads and flange nuts	
FA/933	ISO 4161
FA/934	ISO 4162
Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets	
FA/411	ANSI/ASME B18.3
FA/932	ISO 4759-1
Dimensions of fasteners - straightness	
FA/935	ISO 4759-1
External thread parameters - system 21	
FA/379	ANSI/ASME B1.3M
Internal thread parameters - system 21	
FA/391	ANSI/ASME B1.3M
Surface texture	
FA/937	ISO 4288

Mechanical and Physical Testing and Inspection

Adhesion of metallic coatings on fasteners	
FA/144	ISO 2819
Axial tensile strength of full-size threaded fasteners	
FA/270	ISO 898-1 Sec. 8.2
Measurement of fastener coating thickness - magnetic methods	
FA/153	ASTM B499
Measurement of fastener coating thickness - microscopical method	
FA/162	ISO 1463
Microhardness of fasteners	
FA/191	ISO 6507-2
FA/192	ISO 6507-3
Proof load of full-size externally threaded fasteners	
FA/228	ISO 898-1 Sec. 8.4

Proof load of internally threaded fasteners (nuts)	
FA/239	ISO 898-2 Sec. 8.1
Rockwell hardness of fasteners	
FA/200	ISO 6508
Tension testing of machined specimens from externally threaded fasteners	
FA/282	ISO 898-1
Total extension at fracture of externally threaded fasteners	
FA/287	ISO 3506
Wedge tensile strength of full-size threaded fasteners	
FA/294	ISO 898-1 Sec. 8.5
Yield strength of full-size externally threaded fasteners	
FA/298	ASTM F606 Sec. 3.2.4

Metallography

Decarburization and case depth measurement in fasteners	
FA/324	ISO 898-1
FA/928	ISO 2639
Macroscopic examination of fasteners by etching	
FA/929	ISO 4969
Surface discontinuities of externally threaded fasteners	
FA/359	ISO 6157-1
FA/360	ISO 6157-3
Surface discontinuities of internally threaded fasteners	
FA/727	ISO 6157-2

NVLAP LAB CODE 200300-0

Akzo Kashima Ltd., Kawasaki Technical Center

5-23-13 Minamikase, Saiwai-ku
Kawasaki 211
JAPAN
Contact: Mr. Shuichi Kobayashi
Phone: 81-479-40-1097
Fax: 81-479-46-1788

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
12/T01	Terminal Equipment Network Protection Standards, FCC Method - 47 CFR Part 68 - Analog and Digital
12/T01a	68.302 (Par. c,d,e,f) Environmental simulation; 68.304 Leakage current limit.; 68.306 Hazardous voltage limit.; 68.308 Signal power limit.; 68.310 Longitudinal balance limit.; 68.312 On-hook impedance limit.; 68.314 Billing protection
12/T01b	68.316 Hearing Aid Compatibility: technical standards
12/T01c	68.302 Environmental simulation (Par. a,b)
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200303-0

A.E.S.L.

800 North Mary Street
Tempe, AZ 85281-1945
Contact: Mr. Kenneth W. Hokanson
Phone: 602-966-7171
Fax: 602-394-0188

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 200304-0

GEC Marconi Avionics Ltd Environmental and EMC Test Center

Airport Works
Rochester
Kent ME1 2XX
UNITED KINGDOM
Contact: Mr. Frank Ewen
Phone: 01-634-816794
Fax: 01-634-816647
E-Mail: frank.ewen@gecm.com

MIL-STD-462 Test Methods

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A06	MIL-STD-462 Method CE03
12/A12	MIL-STD-462 Method CE07
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B05	MIL-STD-462 Method CS06
Radiated Emissions:	
12/D02	MIL-STD-462 Method RE02
Radiated Susceptibility:	
12/E02	MIL-STD-462 Method RS02
12/E03	MIL-STD-462 Method RS03 (Consult laboratory for field strengths available)
12/E04	MIL-STD-462 Method RS03 employing RADHAZ procedures for high level testing

(Consult laboratory for field strengths available)

NVLAP LAB CODE 200305-0

GE Owensboro Test Laboratory

3301 Old Hartford Road
Owensboro, KY 42718
Contact: Mr. Robert Riley
Phone: 502-686-1212
Fax: 502-686-1240

Efficiency of Electric Motors

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
24/M01	IEEE 112, Method B

NVLAP LAB CODE 200306-0

Zacta Technology Corporation Yonezawa Testing Center

4149-7 Hachimanpara 5-chome
Yonezawa-shi Yamagata 992-1128
JAPAN
Contact: Mr. Shin-ichi Abe
Phone: 81-238-28-2880
Fax: 81-238-28-2888
E-Mail: albatross_abe@hi-ho.ne.jp

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200307-0

Rocknel Fastener Inc.

5309 11th Street
Rockford, IL 61125-7009
Contact: Mr. White White
Phone: 815-873-4048
Fax: 815-873-4011

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of fasteners - flange screw heads and flange nuts	
FA/690	JIS B1071
Dimensions of fasteners - straightness	
FA/648	JIS B1071
Dimensions of general purpose fasteners and high-volume machine assembly fasteners	
FA/404	ANSI/ASME B18.18.2M
FA/607	JIS B1071
External thread parameters - ISO	
FA/624	JIS B0252
FA/884	JIS B0251
External thread parameters - system 21	
FA/379	ANSI/ASME B1.3M
External thread parameters - system 22	
FA/381	ANSI/ASME B1.3M
Mechanical and Physical Testing and Inspection	
Adhesion of metallic coatings on fasteners	
FA/143	ASTM B571
FA/595	JIS H8504
Axial tensile strength of full-size threaded fasteners	
FA/267	ASTM F606M Sec. 3.4.1-3.4.3
FA/270	ISO 898-1 Sec. 8.2
FA/574	JIS B1051 Sec. 4.2.2
Hardness preparation	
FA/464	ASTM F606M
Measurement of fastener coating thickness - eddy-current method	
FA/618	JIS H8501
Microhardness of fasteners	
FA/189	ASTM E384
Proof load of full-size externally threaded fasteners	
FA/228	ISO 898-1 Sec. 8.4
FA/467	ASTM F606M Sec. 3.2.1-3.2.3
FA/573	JIS B1051 Sec. 4.2.4
Rockwell hardness of fasteners	
FA/572	JIS Z2245
Rockwell superficial hardness of fasteners	
FA/205	ASTM E18

Total extension at fracture of externally threaded fasteners

FA/286 ASTM F606M Sec. 3.7

Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)

FA/571 JIS Z2244

Wedge tensile strength of full-size threaded fasteners

FA/291 ASTM F606M Sec. 3.5
FA/294 ISO 898-1 Sec. 8.5
FA/575 JIS B1051 Sec. 4.2.3

Yield strength of full-size externally threaded fasteners

FA/300 ASTM F606M Sec. 3.2.4
FA/686 JIS B1051 Sec. 4.2.2
FA/885 ISO 6892

Metallography

Decarburization and case depth measurement in fasteners

FA/324 ISO 898-1

Surface discontinuities of externally threaded fasteners

FA/359 ISO 6157-1

NVLAP LAB CODE 200308-0

SNB Laboratory

49 Abbott Street
P.O. Box 68
Cumberland, RI 02864-0968
Contact: Mr. James Faria
Phone: 401-722-6700
Fax: 401-726-4960

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*

Dimensional Inspection

Dimensions of fasteners - bearing surface squareness

FA/745 ANSI B18.2.1

Dimensions of fasteners - straightness

FA/423 ANSI/ASME B18.2.1

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/486 MIL-STD-120 (W/ Notice dtd 9 SEP 63)

External thread parameters - system 21

FA/379 ANSI/ASME B1.3M
FA/940 ANSI/ASME B1.2

External thread parameters - system 22

FA/381 ANSI/ASME B1.3M
FA/941 ANSI/ASME B1.2

Internal thread parameters - system 21

FA/391 ANSI/ASME B1.3M
FA/942 ANSI/ASME B1.2

Internal thread parameters - system 22

FA/393 ANSI/ASME B1.3M
FA/943 ANSI/ASME B1.2

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/265 ASTM A370 Sec. A3.2.1.4
FA/266 ASTM F606 Sec. 3.4.1-3.4.3
FA/273 SAE J429

Cone proof load of internally threaded fasteners (nuts)

FA/220 ASTM F606 Sec. 4.3

Magnetic permeability

FA/214 ASTM A342 Test Method 3

Proof load of full-size externally threaded fasteners

FA/226 ASTM F606 Sec. 3.2.1-3.2.3
FA/229 SAE J429 Sec. 5.3

Proof load of internally threaded fasteners (nuts)

FA/236 ASTM F606 Sec. 4.2

Rockwell hardness of fasteners

FA/197 ASTM E18

Tension testing of machined specimens from externally threaded fasteners

FA/278 ASTM A370
FA/279 ASTM F606 Sec. 3.6

Wedge tensile strength of full-size threaded fasteners

FA/289 ASTM A370
FA/290 ASTM F606 Sec. 3.5

Yield strength of full-size externally threaded fasteners

FA/298 ASTM F606 Sec. 3.2.4

NVLAP LAB CODE 200309-0

TDK Corporation's 10m Anechoic Chamber and Chikumagawa Open Site

2-15-7 Higashi-Owada
Ichikawa-shi, Chiba-ken 272
JAPAN
Contact: Mr. Akira Bandoh
Phone: 011-81-47-378-9190
Fax: 011-81-47-378-9780
E-Mail: HFE00246@niftyserve.or.jp

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51 AS/NZS 3548

Federal Communications Commission (FCC) Methods

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22 IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200310-0

EMSL Analytical, Inc.

700 Gotham Parkway
Carlstadt, NJ 07072
Contact: Ms. Gael E. Miller
Phone: 201-531-2666
Fax: 201-531-1769

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: March 31, 1999

Airborne Asbestos Analysis (TEM)

Accreditation Valid Through: March 31, 1999

NVLAP LAB CODE 200312-0

Sony Electronics Inc. Product Quality Division EMC Group

16450 West Bernardo Drive, Building 8
San Diego, CA 92127-1804
Contact: Mr. Dave Traver
Phone: 619-673-2601
Fax: 619-674-5967

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200313-0

Eastman Kodak Co.-Regulatory Compliance Center-EMC Facility

901 Elmgrove Road
Rochester, NY 14653-5513
Contact: Ms. Gina T. Wyffels
Phone: 716-726-3200
Fax: 716-726-4297
E-Mail: 234010n@isbpgate.kodak.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200314-0

MQS Inspection, Inc. Magnetic Particle & Liquid Penetrant Exam.

9910 Jordan Circle
Santa Fe Springs, CA 90670
Contact: Mr. Stephen R. Mesko
Phone: 562-944-8511
Fax: 562-9606-0331

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Nondestructive Inspection	
Liquid penetrant inspection of fasteners	
FA/527	ASTM E1417
Magnetic particle inspection of fasteners	
FA/485	ASTM E1444

NVLAP LAB CODE 200316-0

ASC geoscience, inc.

3055 Drane Field Road
Lakeland, FL 33811-1332
Contact: Mr. Anu Saxena, P.E.
Phone: 941-644-8300
Fax: 941-644-8203

Construction Materials Testing

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Aggregates	
02/A03	ASTM C29
02/A07	ASTM C117
02/A09	ASTM C127
02/A12	ASTM C136
Concrete	
02/A01	ASTM C39
02/A02	ASTM C617
02/A40	ASTM C78
02/A43	ASTM C1064
02/A45	ASTM C42
02/G01	ASTM C31/C172/C143/C138/C231
02/G02	ASTM C173
Road and Paving Materials	
02/M07	ASTM D546
02/M08	ASTM D979
02/M19	ASTM D2172
02/M24	ASTM D2041
Soil and Rock	
02/L04	ASTM D698
02/L06	ASTM D1140
02/L07	ASTM D1556
02/L08	ASTM D1557
02/L12	ASTM D2168
02/L20	ASTM D4318
02/L23	ASTM D2922
02/L25	ASTM D3017
Standard Practices	
02/M26	ASTM D3666

NVLAP LAB CODE 200317-0

Raytheon Technical Services Co. EMI Laboratory

6125 E. 21st Street, M/S 60
Indianapolis, IN 46219-2058
Contact: Mr. Keith Hines
Phone: 317-306-7484
Fax: 317-306-3690

MIL-STD-462 Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Conducted Emissions:	
12/A06	MIL-STD-462 Method CE03
Conducted Susceptibility:	
12/B01	MIL-STD-462 Method CS01
12/B02	MIL-STD-462 Method CS02
12/B05	MIL-STD-462 Method CS06
Radiated Emissions:	
12/D02	MIL-STD-462 Method RE02
Radiated Susceptibility:	
12/E02	MIL-STD-462 Method RS02
12/E03	MIL-STD-462 Method RS03 (Consult laboratory for field strengths available)

NVLAP LAB CODE 200318-0

Motorola PPG Compliance Laboratory

1500 Gateway Boulevard, M/S 75
Boynton Beach, FL 33426
Contact: Mr. Mac Elliott, III
Phone: 561-739-3792
Fax: 561-739-2341
E-Mail: FME001@email.met.com

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01b	Radiated Emissions

NVLAP LAB CODE 200319-0

TDK Corporation's Chikumagawa Open Site

543 Otai
Saku-shi, Nagano-ken 389-0209
JAPAN
Contact: Mr. Akira Bandoh
Phone: 011-81-47-378-9190
Fax: 011-81-47-378-9780
E-Mail: HFE00246@niftfyserve.or.jp

FCC Test Methods

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200320-0

Modern Plating Corporation

P.O. Box 838, South Hancock Avenue
Freeport, IL 61032-0838
Contact: Mr. Daniel James Mauer
Phone: 815-235-3111
Fax: 815-235-4571

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Chemical Analysis	
Solution chemical analysis	
FA/969	MPC AA Work Instructions
Dimensional Inspection	
Dimensions of general purpose fasteners and high-volume machine assembly fasteners	
FA/404	ANSI/ASME B18.18.2M
Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap	
FA/405	ANSI/ASME B18.18.3M
FA/406	ANSI/ASME B18.18.4M
Mechanical and Physical Testing and Inspection	
Adhesion of metallic coatings on fasteners	
FA/143	ASTM B571
Measurement of fastener coating thickness - X-ray methods	
FA/556	ASTM B568
Measurement of fastener coating thickness - eddy-current method	
FA/148	ASTM B244
Measurement of fastener coating thickness - magnetic methods	
FA/153	ASTM B499
Measurement of fastener coating thickness - weight of coating	
FA/970	MPC Coating Weight Work Instructions
Salt spray testing of fasteners	
FA/166	ASTM B117

NVLAP LAB CODE 200321-0

Binder Metal Products, Inc.

14909 South Broadway
Gardena, CA 90248
Contact: Mr. Bill Weber
Phone: 213-321-4835
Fax: 310-532-2936

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of fasteners - flatness	
FA/975	ASME Y14.5M
FA/976	Binder QAI 0007
Mechanical and Physical Testing and Inspection	
Hardness preparation	
FA/482	ASTM F606
Measurement of fastener coating thickness - eddy-current method	
FA/977	Binder QAI 0005
Rockwell hardness of fasteners	
FA/197	ASTM E18
FA/978	Binder QAI 0006

NVLAP LAB CODE 200323-0

ALAC

810 Pelham Pkwy. South, Suite 5F
Bronx, NY 10462
Contact: Mr. Aleksandr Knobel
Phone: 718-828-1308
Fax: 718-239-2896

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200324-0

Clark Seif Clark, Inc.

21732 Devonshire Street, 2nd Floor
Chatsworth, CA 91311
Contact: Mr. Christian Goerrissen
Phone: 818-727-2553
Fax: 818-727-2556

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200325-0

TEC-AN, Inc.

3535 N.W. 58th Street, Suite 470E
Oklahoma City, OK 73112
Contact: Mr. Donald J. Nist
Phone: 405-943-3358
Fax: 405-943-0363

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200326-0

Hadd-Co Inspection Lab

2420 Amsler Street
Torrance, CA 90505-5302
Contact: Mr. George Haddad
Phone: 310-325-7620
Fax: 310-325-9655

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP
Code *Designation*

Nondestructive Inspection

Liquid penetrant inspection of fasteners

FA/366 AMS 2645
FA/370 MIL-STD-271
FA/371 MIL-STD-6866
FA/527 ASTM E1417
FA/987 ASTM E1208
FA/988 ASTM E1209
FA/989 MIL-I-6866

Magnetic particle inspection of fasteners

FA/374 ASTM E709
FA/376 MIL-STD-271
FA/377 MIL-STD-1949
FA/485 ASTM E1444
FA/990 MIL-I-6868

NVLAP LAB CODE 200327-0

Saturn Fasteners, Inc.

425 South Varney Street
Burbank, CA 91502
Contact: Mr. Robert P. Whitley
Phone: 818-846-7145
Fax: 818-846-7306

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP
Code *Designation*

Dimensional Inspection

Dimensions of fasteners - hexagon and double hexagon (12 point) and spline sockets

FA/972 NAS 4002
FA/973 NAS 624-644

Dimensions of fasteners - straightness

FA/974 NAS 4002

External thread parameters - SAE fastener with MJ metric screw threads

FA/693 FED-STD-H28/20

External thread parameters - system 21

FA/380 FED-STD-H28/20

External thread parameters - system 22

FA/382 FED-STD-H28/20

External thread parameters - system 23

FA/386 FED-STD-H28/20

Surface texture

FA/439 ANSI/ASME B46.1

Mechanical and Physical Testing and Inspection

Bend test of full size eyebolts

FA/971 MIL-B-6812 Section 4.5.4

Breaking strength of fullsize eyebolts

FA/508 MIL-STD-1312-8

Double shear of externally threaded fasteners

FA/257 MIL-STD-1312-13

Fatigue of full-size threaded fasteners

FA/183 MIL-STD-1312-11

Hydrogen embrittlement (stress durability) of externally threaded fasteners

FA/176 MIL-STD-1312-5

Magnetic permeability

FA/214 ASTM A342 Test Method 3

Measurement of fastener coating thickness - dimensional change method

FA/495 MIL-STD-1312-12

Measurement of fastener coating thickness - eddy-current method

FA/152 MIL-STD-1312-12

Microhardness of fasteners

FA/189 ASTM E384

Recess strength test in both the installation and removal directions

FA/476 MIL-STD-1312-25

Rockwell hardness of fasteners

FA/201 MIL-STD-1312-6

Rockwell superficial hardness of fasteners

FA/209 MIL-STD-1312-6

Tension testing of machined specimens from externally threaded fasteners

FA/475 ASTM E8

Wedge tensile strength of full-size threaded fasteners

FA/290 ASTM F606 Sec. 3.5

Metallography

Decarburization and case depth measurement in fasteners

FA/483 ASTM A574 Sec. 12

Determination of grain size of fasteners

FA/331 ASTM E112

Macroscopic examination of fasteners by etching

FA/511 ASTM E340

Microscopic examination of fasteners by etching

FA/341 ASTM E1077

Surface discontinuities of externally threaded fasteners

FA/357 ASTM F788/788M

NVLAP LAB CODE 200328-0

Prospect Testing Labs, Inc.

1245 Forest Avenue
Des Plaines, IL 60018
Contact: Mr. Seung W. Lyu
Phone: 847-827-4766
Fax: 847-299-6222

Fasteners & Metals

Accreditation Valid Through: March 31, 1999

NVLAP Code	*Designation*

Chemical Analysis

Optical emission spectrochemical analysis

FA/457	ASTM E415
FA/459	ASTM E1086
FA/460	ASTM E1251

Mechanical and Physical Testing and Inspection

Axial tensile strength of full-size threaded fasteners

FA/266	ASTM F606 Sec. 3.4.1-3.4.3
FA/273	SAE J429
FA/530	ASTM E8
FA/799	NASM 1312-8

Hydrogen embrittlement (stress durability) of externally threaded fasteners

FA/875	NASM 1312-5
FA/924	ASTM F606
FA/967	GM 6010M

Hydrogen embrittlement (stress durability) of internally threaded fasteners

FA/968	GM 6010M

Intergranular corrosion susceptibility in austentic stainless steel fasteners - nitric aci

FA/173	ASTM A262 Sec. 15-21, Practice C

Intergranular corrosion susceptibility of austentic stainles steel fasteners - oxalic acid

FA/174	ASTM A262 Sec. 3-7, Practice A

Measurement of fastener coating thickness - microscopical method

FA/160	ASTM B487
FA/873	NASM 1312-12

Measurement of fastener coating thickness - weight of coating

FA/164	ASTM A90

Microhardness of fasteners

FA/189	ASTM E384

Proof load of full-size externally threaded fasteners

FA/226	ASTM F606 Sec. 3.2.1-3.2.3
FA/229	SAE J429

Proof load of internally threaded fasteners (nuts)

FA/236	ASTM F606 Sec. 4.2
FA/241	SAE J995 Sec. 5.1

Rockwell hardness of fasteners

FA/197	ASTM E18

Rockwell superficial hardness of fasteners

FA/205	ASTM E18

Torque-tension of full-size threaded fasteners

FA/882	NASM 1312-15

Torsional strength test of thread rolling and self-drilling tappings screws

FA/252	ASTM F738M
FA/751	SAE J933
FA/966	ASTM F880M

Wedge tensile strength of full-size threaded fasteners

FA/290	ASTM F606 Sec. 3.5
FA/468	SAE J429

Metallography

Decarburization and case depth measurement in fasteners

FA/323	ASTM E1077
FA/328	SAE J121

Determination of grain size of fasteners

FA/331	ASTM E112

Macroscopic examination of fasteners by etching

FA/551	ASTM E3

Microscopic examination of fasteners by etching

FA/552	ASTM E3

Surface discontinuities of externally threaded fasteners

FA/361	SAE J123
FA/362	SAE J1061

Surface discontinuities of internally threaded fasteners

FA/365	SAE J122

NVLAP LAB CODE 200329-0

Fabristeel Products Inc.

22100 Trolley Industrial Drive
Taylor, MI 48180
Contact: Ms. Michelle Stawowy
Phone: 313-299-1178
Fax: 313-299-1190

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*

Dimensional Inspection

Dimensions of general purpose fasteners and high-volume machine assembly fasteners

FA/403	ANSI/ASME B18.18.1M
FA/404	ANSI/ASME B18.18.2M

External thread parameters - SAE fastener with MJ metric screw threads

FA/662	ISO 1502

External thread parameters - system 21

FA/379	ANSI/ASME B1.3M

External thread parameters - system 22

FA/381	ANSI/ASME B1.3M

Internal thread parameters - ISO

FA/402	ISO 1502

Internal thread parameters - system 21

FA/391	ANSI/ASME B1.3M

Internal thread parameters - system 22

FA/393	ANSI/ASME B1.3M

Mechanical and Physical Testing and Inspection

Microhardness of fasteners

FA/189	ASTM E384

Rockwell hardness of fasteners

FA/196	ASTM A370 Sec. 18
FA/197	ASTM E18
FA/200	ISO 6508
FA/202	SAE J417

Rockwell superficial hardness of fasteners

FA/205	ASTM E18
FA/206	ASTM A370 Sec. 18

Metallography

Decarburization and case depth measurement in fasteners

FA/323	ASTM E1077
FA/324	ISO 898-1
FA/325	ISO 898-5
FA/328	SAE J121
FA/329	SAE J419
FA/758	SAE J121M

Macroscopic examination of fasteners by etching

FA/334	ISO 6157-1
FA/335	ISO 6157-3
FA/336	SAE J123
FA/337	SAE J1061

Microscopic examination of fasteners by etching

FA/341	ASTM E1077
FA/342	ISO 898-1
FA/343	ISO 898-5
FA/344	SAE J121
FA/471	SAE J419
FA/759	SAE J121M

Surface discontinuities of externally threaded fasteners

FA/357	ASTM F788/788M
FA/358	ASTM F788M
FA/359	ISO 6157-1
FA/360	ISO 6157-3
FA/361	SAE J123
FA/362	SAE J1061

Surface discontinuities of internally threaded fasteners

FA/363	ASTM F812
FA/364	ASTM F812M
FA/365	SAE J122

NVLAP LAB CODE 200331-0

HomeTek Technology Inc.

No. 85-5 Shir Men Rd., Tu Cheng City
Taipei Shien 236
TAIWAN
Contact: Mr. Grant Huang
Phone: 886-2-22608375
Fax: 886-2-22748013
E-Mail: hometek@ms15.hinet.net

FCC Test Methods

Accreditation Valid Through: September 30, 1999

Australian Standards referred to by clauses in AUSTEL Technical Standards

NVLAP Code	*Designation*
12/T51	AS/NZS 3548

Federal Communications Commission (FCC) Methods

NVLAP Code	*Designation*
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

International Special Committee on Radio Interference (CISPR) Methods

NVLAP Code	*Designation*
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200333-0

EMSL Analytical, Inc.

175 Clearbrook Road
Cross West Chester Executive Plaza
Elmsford, NY 10523
Contact: Mr. Robert Georgens
Phone: 914-592-4688
Fax: 914-592-6798

URL: http://www.emsl.com

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)

Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200335-0

Hygeia Laboratories, Inc.

9955 NW 116 Way, Suite 1
Miami, FL 33178
Contact: Mr. Julio Lopez
Phone: 305-882-8200
Fax: 305-882-1200
E-Mail: LOPEZ31@ATC-ENVIRO.COM

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: June 30, 1999

Airborne Asbestos Analysis (TEM)

Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200336-0

Pratt & Whitney Materials Control Laboratory

400 Main Street, Mail Stop 184-25
East Hartford, CT 06108
Contact: Mr. Donald J. Baron
Phone: 860-565-2857
Fax: 860-565-2897
E-Mail: barondj@pweh.com

Fasteners & Metals

Accreditation Valid Through: June 30, 1999

NVLAP Code	*Designation*
Chemical Analysis	
Combustion analysis for carbon, sulfur, oxygen, nitrogen, and hydrogen	
FB/1024	P&W M-165
FB/1025	P&W M-166
FB/1026	P&W M-175
Energy dispersive X-ray analysis	
FB/1030	P&W N-51
Optical emission spectrochemical analysis	
FB/1027	P&W M-186
FB/1028	P&W N-11
X-ray fluorescence (XRF) spectrochemical analysis	
FB/1029	P&W N-60
Mechanical and Physical Testing and Inspection	
Axial tensile strength of full-size threaded fasteners	
FB/1018	P&W K-32
Brinell hardness of fasteners	
FB/1009	P&W E-O Supp C
Charpy impact (v-notch) testing	
FB/1014	P&W K-162
Fatigue of full-size threaded fasteners	
FB/1008	P&W K-317
Flareability test of clinch and shank nuts	
FB/1006	P&W K-309
Microhardness of fasteners	
FB/1010	P&W E-O Supp C
Proof load of full-size externally threaded fasteners	
FB/1015	P&W K-32
Proof load of internally threaded fasteners (nuts)	
FB/1016	P&W K-32
Rockwell hardness of fasteners	
FB/1011	P&W E-O Supp C
Rockwell superficial hardness of fasteners	
FB/1012	P&W E-O Supp C
Salt spray testing of fasteners	
FB/1007	P&W P-23
Stress rupture of fasteners	
FB/1017	P&W E-1107
Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)	
FB/1013	P&W E-O Supp C
Metallography	
Decarburization and case depth measurement in fasteners	
FB/1019	P&W E-23
Determination of grain size of fasteners	
FA/331	ASTM E112
Macroscopic examination of fasteners by etching	
FB/1020	P&W K-76
Microscopic examination of fasteners by etching	
FB/1021	P&W E-23
Surface discontinuities of externally threaded fasteners	
FB/1022	P&W E-23
FB/1023	P&W E-242

NVLAP LAB CODE 200337-0

IBM Charlote EMC Facility

8501 IBM Drive, MG 22-202
Charlotte, NC 28262-8563
Contact: Mr. Donald B. Steigerwalt
Phone: 704-594-1533
Fax: 704-594-7376
E-Mail: dsteigerwalt@vnet.ibm.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz

International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200339-0

Incotec Laboratory

1391 Poole Street
Mojave, CA 93501
Contact: Mr. Winston E. Wade
Phone: 805-824-8101
Fax: 805-824-1558

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Mechanical and Physical Testing and Inspection	
Adhesion of metallic coatings on fasteners	
FA/532	BMS 10-85M Sec. 8.2
FA/779	BSS 7225
FA/996	ASTM D4541
FA/997	HS 292
FA/998	HS 294
FA/999	NAS 4006
Adhesion of nonmetallic coatings on fasteners	
FA/991	BSS 7225
FA/992	HS 292
Coating endurance	
FA/995	ASTM D2625
Copper sulfate test - test for free iron on the surface of corrosion resistant fasteners	
FA/636	MIL-STD-753 Test 102
Elevated temperature testing capability	
FB/1001	BMS 10-85
FB/1002	BSS 7225
Film hardness	
FA/993	BMS 10-85M
FA/994	ASTM D3363
Humidity testing of fasteners	
FA/169	MIL-STD-753 Test Method 101
FA/548	ASTM D2247
Measurement of fastener coating thickness - dimensional change method	
FA/495	MIL-STD-1312-12
Measurement of fastener coating thickness - microscopical method	
FA/163	MIL-STD-1312-12
Salt spray testing of fasteners	
FA/166	ASTM B117
FB/1000	ASTM G85
Water immersion method - test for anodic surface containment on corrosion resistant fasten	
FA/756	MIL-STD-753 Test 100

NVLAP LAB CODE 200340-0

Diviersified T.E.S.T. Technologies, Inc.

556 Route 222, P.O. Box 8
Groton, NY 13073
Contact: Mr. Thomas P. Sims
Phone: 607-898-4218
Fax: 607-898-4830
E-Mail: tom@diversifiedtechnol.com
URL: http://diversifiedtechnol.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200341-0

United Steel and Fasteners Inc.

1500 Industrial Drive
Itasca, IL 60143
Contact: Mr. Antonio Zaccari
Phone: 630-250-0900
Fax: 630-250-0220
E-Mail: us_f@msn.com

Fasteners & Metals

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Dimensional Inspection	
Dimensions of fasteners - bearing surface squareness	
FA/745	ANSI B18.2.1
Dimensions of fasteners - straightness	
FA/423	ANSI/ASME B18.2.1
Dimensions of general purpose fasteners and high-volume machine assembly fasteners	
FA/494	ANSI B18.2.1
Mechanical and Physical Testing and Inspection	
Axial tensile strength of full-size threaded fasteners	
FA/266	ASTM F606 Sec. 3.4.1-3.4.3
FA/273	SAE J429

Proof load of full-size externally threaded fasteners

FA/226	ASTM F606 Sec. 3.2.1-3.2.3
FA/229	SAE J429

Rockwell hardness of fasteners

FA/202	SAE J417
FA/482	ASTM F606

Tension testing of machined specimens from externally threaded fasteners

FA/279	ASTM F606 Sec. 3.6
FA/283	SAE J429

NVLAP LAB CODE 200344-0

EMSL Analytical Mobile Laboratory

4444 West Haddon Avenue
Chicago, IL 60651
Contact: Ms. Lee Harbour
Phone: 773-235-1409
Fax: 773-235-1434

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 200345-0

Ricoh Company LTD. Ohmori Acoustics Test Site

3-6, 1 Chome, Nakamagome, Ohta-ku
Tokyo 143-8555
JAPAN
Contact: Mr. Yuji Noritake
Phone: 03-3777-8183
Fax: 03-3777-0811
E-Mail: yuji.noritake@nts.ricoh.co.jp

Acoustical Testing Services
Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
08/P24	ANSI S12.10 (ISO 7779)

NVLAP LAB CODE 200346-0

SCILAB California, Inc.

24416 South Main Street, Suite 308
Carson, CA 90745
Contact: Mr. Roobik Yaghoubi
Phone: 310-834-4868
Fax: 310-834-4772

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200347-0

Quietek Corporation

12F-4, No. 333, Sec. 1, Guan-Fu Road
Hsin-Chu City
TAIWAN
Contact: Mr. Gene Chang
Phone: 886-3-5928858
Fax: 886-3-5928859
E-Mail: genecha@ms6.hinet.net

FCC Test Methods
Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

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NVLAP LAB CODE 200349-0

Crisp Analytical Laboratory

2081 Hutton Drive, Suite 309
Carrollton, TX 75006
Contact: Mr. David Bertolacci
Phone: 972-488-1414
Fax: 972-488-8006

Bulk Asbestos Analysis (PLM)
Accreditation Valid Through: September 30, 1999

Airborne Asbestos Analysis (TEM)
Accreditation Valid Through: September 30, 1999

(See 'How To Use This Directory' on page 7.)

NVLAP LAB CODE 200350-0

White Environmental Consultants, Inc.

1130 N. Nimitz Hwy. #3220
Honolulu, HI 96817
Contact: Mr. Jim Willard
Phone: 808-536-8819
Fax: 808-536-0191
E-Mail: weclabs@gte.net

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 200353-0

Alloy & Stainless Testing

1493 London Bridge Road
Virginia Beach, VA 23456
Contact: Mr. Randy Earles
Phone: 757-427-0111 x111
Fax: 757-427-2658
E-Mail: RAEARLES@AOL.COM

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

Dimensional Inspection

NVLAP Code	*Designation*
Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap	
FA/963	ANSI B18.2.1
External thread parameters - system 21	
FA/379	ANSI/ASME B1.3M
External thread parameters - system 22	
FA/381	ANSI/ASME B1.3M
Internal thread parameters - system 21	
FA/391	ANSI/ASME B1.3M

NVLAP LAB CODE 200356-0

M&M Manufacturing Corporation

5611 Kimball Court
Chino, CA 91710
Contact: Ms. Wendy McBride
Phone: 909-597-7211
Fax: 909-597-0881

Fasteners & Metals

Accreditation Valid Through: December 31, 1999

Dimensional Inspection

NVLAP Code	*Designation*
Dimensions of fasteners - straightness	
FA/423	ANSI/ASME B18.2.1
Dimensions of general purpose fasteners and high-volume machine assembly fasteners	
FA/403	ANSI/ASME B18.18.1M
FA/404	ANSI/ASME B18.18.2M
Dimensions of special purpose fasteners and fasteners for highly specialized engineered ap	
FA/405	ANSI/ASME B18.18.3M
FA/406	ANSI/ASME B18.18.4M
External thread parameters - system 22	
FA/382	FED-STD-H28/20
Surface texture	
FA/439	ANSI/ASME B46.1

Mechanical and Physical Testing and Inspection

NVLAP Code	*Designation*
Axial tensile strength of full-size threaded fasteners	
FA/271	MIL-STD-1312-8
Double shear of externally threaded fasteners	
FA/257	MIL-STD-1312-13
Hydrogen embrittlement (stress durability) of externally threaded fasteners	
FA/176	MIL-STD-1312-5
Measurement of fastener coating thickness - dimensional change method	
FA/495	MIL-STD-1312-12
Measurement of fastener coating thickness - microscopical method	
FA/163	MIL-STD-1312-12
Microhardness of fasteners	
FA/193	MIL-STD-1312-6
Recess strength test in both the installation and removal directions	
FA/476	MIL-STD-1312-25
Rockwell hardness of fasteners	
FA/201	MIL-STD-1312-6
Rockwell superficial hardness of fasteners	
FA/209	MIL-STD-1312-6
Single shear of externally threaded fasteners	
FA/256	MIL-STD-1312-20
Vickers hardness - test forces from 9.807 to 1176 N (1 to 120 kgf)	
FA/671	MIL-STD-1312-6

Metallography

NVLAP Code	*Designation*
Decarburization and case depth measurement in fasteners	
FA/323	ASTM E1077
Determination of grain size of fasteners	
FA/331	ASTM E112
Macroscopic examination of fasteners by etching	
FA/511	ASTM E340
FA/651	ASTM F788/788M
Microscopic examination of fasteners by etching	
FA/341	ASTM E1077
FA/345	ASTM F788/788M
FA/351	ASTM E112
FA/512	ASTM E407
FA/552	ASTM E3
FA/679	ASTM A574

Surface discontinuities of externally threaded fasteners

FA/357	ASTM F788/788M

Nondestructive Inspection

Liquid penetrant inspection of fasteners

FA/527	ASTM E1417

Magnetic particle inspection of fasteners

FA/485	ASTM E1444

NVLAP LAB CODE 200357-0

AGRA Earth and Environmental, Inc. - Env. Chemistry Laboratory

7477 SW Tech Center Dr.
Portland, OR 97223-8025
Contact: Mr. Sean F. Gormley
Phone: 503-639-3400
Fax: 503-620-7892
E-Mail: sgormley@agrans.com

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: December 31, 1999

NVLAP LAB CODE 200358-0

Patriot Environmental Laboratory Services

12752 Valley View St., Suite C
Garden Grove, CA 92845
Contact: Mr. James Thornbrugh, II
Phone: 714-899-8900
Fax: 714-899-7098
E-Mail: JThornbrugh@earthlink.net

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: September 30, 1999

NVLAP LAB CODE 200361-0

Architectural Testing Inc.

130 Derry Ct.
York, PA 17402
Contact: Mr. Eric J. Miller
Phone: 717-764-7700
Fax: 717-764-4129
E-Mail: ati.york@worldnet.att.net

Acoustical Testing Services

Accreditation Valid Through: September 30, 1999

NVLAP Code	*Designation*
08/P03	ASTM C423 (ISO 354)
08/P06	ASTM E90 (ISO 140, Part 3)
08/P30	ASTM E1408
08/P31	ASTM E336
08/P37	ASTM E966
08/P43	ASTM E1425

NVLAP LAB CODE 200362-0

TEAC Corporation EMC Center

857 Koyata, Iruma-shi
Saitama-ken 358-851
Iruma-shi 81-358-8510
JAPAN
Contact: Mr. Daihachiro Takasu
Phone: 81-42-462-7159
Fax: 81-42-963-7153
E-Mail: d-takasu@it.teac.co.jp

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
	Federal Communications Commission (FCC) Methods
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

NVLAP LAB CODE 200363-0

Sun Microsystems, Inc. EMC Testing

901 San Antonio Road
MS UMPK25-101
Palo Alto, CA 94303-4900
Contact: Mr. Hugh Hagel
Phone: 650-786-3215
Fax: 650-786-4316
E-Mail: Hugh.Hagel@sun.com

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
	Australian Standards referred to by clauses in AUSTEL Technical Standards
12/T51	AS/NZS 3548
	Federal Communications Commission (FCC) Methods
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
	International Special Committee on Radio Interference (CISPR) Methods
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200368-0

Sony Minokamo EMC Site

9-15-22, Hongo-cho Minokamo City
Gifu-Pref. 505-8510
JAPAN
Contact: Mr. Kazuo Takarajima
Phone: 81-574-25-8161
Fax: 81-574-28-8087
E-Mail: takarajm@mkm.sony.co.jp

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions

NVLAP LAB CODE 200373-0

Fujitsu General EMC Laboratory

1116, Suenaga, Takatsu-ku
Kawasaki 213-8502
JAPAN
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Phone: 81-44-861-7897
Fax: 81-44-861-9890
E-Mail: shimanoe@fujitsugeneral.co.jp

FCC Test Methods

Accreditation Valid Through: December 31, 1999

NVLAP Code	*Designation*
Australian Standards referred to by clauses in AUSTEL Technical Standards	
12/T51	AS/NZS 3548
Federal Communications Commission (FCC) Methods	
12/F01	FCC Method - 47 CFR Part 15 - Digital Devices
12/F01a	Conducted Emissions, Power Lines, 450 KHz to 30 MHz
12/F01b	Radiated Emissions
International Special Committee on Radio Interference (CISPR) Methods	
12/CIS22	IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

NVLAP LAB CODE 200374-0

EnviroHealth Technologies, Inc.

3830 Washington Boulevard, Suite 123
St. Louis, MO 63108
Contact: Mr. William J. Lowry
Phone: 314-531-9868
Fax: 314-531-9196

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: June 30, 1999

NVLAP LAB CODE 200375-0

EMSL Analytical, Inc.

11931 Industriplex, Suite 100
Baton Rouge, LA 70809
Contact: Mr. Arthur Hernandez, Jr.
Phone: 225-755-1920
Fax: 225-755-1989

URL: http://www.emsl.com

Bulk Asbestos Analysis (PLM)

Accreditation Valid Through: December 31, 1999

Airborne Asbestos Analysis (TEM)

Accreditation Valid Through: December 31, 1999

(See 'How To Use This Directory' on page 7.)

INDEX

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LISTING OF
CALIBRATION
LABORATORIES
BY NVLAP
LAB CODE

NVLAP LAB CODE 105000-0

OAK RIDGE METROLOGY CENTER
P.O. Box 2009
Oak Ridge, TN 37831-7670
Contact: Mr. W. T. (Bill) McKeethan
Phone: 423-574-2707 Fax: 423-574-2802
E-Mail: wmt@ornl.gov
URL: http://www.ornl.gov/orcmt/mfgqual

Accreditation Valid Through: March 31, 1999

DIMENSIONAL

NVLAP Code: 20/D05
Length

Range	*Best Uncertainty* (±)[note 1]	*Remarks*
0 - 1.35 m	(0.3 + 0.4L) micrometers; L is length in meters	Step and End Gages using M-60 Coordinate Measuring Machine
0 - 1.2 m	(0.3 + 0.4L) micrometers; L is length in meters	Step and End Gages using M-48 Coordinate Measuring Machine

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1. Represents an expanded uncertainty using a coverage factor, k=2

NVLAP LAB CODE 105001-0

RICE LAKE WEIGHING SYSTEMS
230 West Coleman Street
P.O. Box 272
Rice Lake, WI 54868
Contact: Mr. Richard Calkins
Phone: 715-234-9171 x243 Fax: 715-234-6967
E-Mail: riccal@rlws.com
URL: http://www.rlws.com

Accreditation Valid Through: March 31, 1999

MECHANICAL

NVLAP Code: 20/M08
Mass

Range	*Best Uncertainty* (±)*$^{note\ 1}$*	*Remarks*
30 kg	6.5 mg	Class I Facility
20 kg	6.4 mg	Class I Facility
10 kg	1.5 mg	Class I Facility
5 kg	0.78 mg	Class I Facility
3 kg	0.52 mg	Class I Facility
2 kg	0.36 mg	Class I Facility
1 kg	0.050 mg	Class I Facility
500 g	0.035 mg	Class I Facility
300 g	0.028 mg	Class I Facility
200 g	0.027 mg	Class I Facility
100 g	0.030 mg	Class I Facility
50 g	0.0165 mg	Class I Facility
30 g	0.0111 mg	Class I Facility
20 g	0.0089 mg	Class I Facility
10 g	0.0084 mg	Class I Facility
5 g	0.0052 mg	Class I Facility
3 g	0.0039 mg	Class I Facility
2 g	0.0035 mg	Class I Facility
1 g	0.0037 mg	Class I Facility
500 mg	0.00276 mg	Class I Facility
300 mg	0.00222 mg	Class I Facility
200 mg	0.00212 mg	Class I Facility
100 mg	0.00242 mg	Class I Facility
50 mg	0.00206 mg	Class I Facility

Range	*Best Uncertainty (±)$^{note\ 1}$*	*Remarks*
30 mg	0.00172 mg	Class I Facility
20 mg	0.00170 mg	Class I Facility
10 mg	0.00196 mg	Class I Facility
5 mg	0.00126 mg	Class I Facility
3 mg	0.00094 mg	Class I Facility
2 mg	0.00086 mg	Class I Facility
1 mg	0.00094 mg	Class I Facility
50 kg	304 mg	Class II Facility
30 kg	7 mg	Class II Facility
20 kg	6 mg	Class II Facility
10 kg	1.5 mg	Class II Facility
5 kg	0.78 mg	Class II Facility
3 kg	0.52 mg	Class II Facility
2 kg	0.36 mg	Class II Facility
1 kg	0.05 mg	Class II Facility
500 g	0.04 mg	Class II Facility
300 g	0.03 mg	Class II Facility
200 g	0.03 mg	Class II Facility
100 g	0.030 mg	Class II Facility
50 g	0.017 mg	Class II Facility
30 g	0.011 mg	Class II Facility
20 g	0.009 mg	Class II Facility
10 g	0.008 mg	Class II Facility
5 g	0.0052 mg	Class II Facility
3 g	0.0039 mg	Class II Facility
2 g	0.0035 mg	Class II Facility
1 g	0.0037 mg	Class II Facility
500 mg	0.003 mg	Class II Facility
300 mg	0.002 mg	Class II Facility
200 mg	0.002 mg	Class II Facility
100 mg	0.002 mg	Class II Facility
50 mg	0.002 mg	Class II Facility
30 mg	0.002 mg	Class II Facility
20 mg	0.002 mg	Class II Facility

(See 'How To Use This Directory' on page 7.)

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
10 mg	0.002 mg	Class II Facility
5 mg	0.001 mg	Class II Facility
3 mg	0.001 mg	Class II Facility
2 mg	0.001 mg	Class II Facility
1 mg	0.001 mg	Class II Facility
1000 kg	19 g	Class III Facility
500 kg	11 g	Class III Facility
200 kg	1.4 g	Class III Facility
100 kg	1.4 g	Class III Facility
50 kg	770 mg	Class III Facility
30 kg	12 mg	Class III Facility
20 kg	12 mg	Class III Facility
10 kg	1.5 mg	Class III Facility
5 kg	0.84 mg	Class III Facility
3 kg	0.59 mg	Class III Facility
2 kg	0.47 mg	Class III Facility
1 kg	0.062 mg	Class III Facility
500 g	0.051 mg	Class III Facility
300 g	0.046 mg	Class III Facility
200 g	0.045 mg	Class III Facility
100 g	0.031 mg	Class III Facility
50 g	0.017 mg	Class III Facility
30 g	0.012 mg	Class III Facility
20 g	0.012 mg	Class III Facility
10 g	0.011 mg	Class III Facility
5 g	0.005 mg	Class III Facility
3 g	0.004 mg	Class III Facility
2 g	0.004 mg	Class III Facility
1 g	0.004 mg	Class III Facility
500 mg	0.003 mg	Class III Facility
300 mg	0.002 mg	Class III Facility
200 mg	0.002 mg	Class III Facility
100 mg	0.003 mg	Class III Facility
50 mg	0.002 mg	Class III Facility

Range	*Best Uncertainty (±)*$^{note\ 1}$	*Remarks*
30 mg	0.002 mg	Class III Facility
20 mg	0.002 mg	Class III Facility
10 mg	0.002 mg	Class III Facility
5 mg	0.001 mg	Class III Facility
3 mg	0.001 mg	Class III Facility
2 mg	0.001 mg	Class III Facility
1 mg	0.001 mg	Class III Facility

NVLAP Code: 20/M08
Mass Avoirdupois

Range	*Best Uncertainty (±)*$^{note\ 1}$	*Remarks*
2500 lb	52 g	Class III Facility
2000 lb	17 g	Class III Facility
1000 lb	6.5 g	Class III Facility
500 lb	1.4 g	Class III Facility
250 lb	1.4 g	Class III Facility
200 lb	1.4 g	Class III Facility
100 lb	49 mg	Class III Facility
50 lb	14 mg	Class III Facility
30 lb	12 mg	Class III Facility
25 lb	23 mg	Class III Facility
20 lb	2.2 mg	Class III Facility
10 lb	1.1 mg	Class III Facility
5 lb	0.63 mg	Class III Facility
4 lb	0.97 mg	Class III Facility
3 lb	0.47 mg	Class III Facility
2 lb	0.10 mg	Class III Facility
1 lb	0.06 mg	Class III Facility
0.5 lb	0.05 mg	Class III Facility
0.3 lb	0.045 mg	Class III Facility
0.2 lb	0.025 mg	Class III Facility
0.1 lb	0.028 mg	Class III Facility
0.05 lb	0.016 mg	Class III Facility
0.03 lb	0.012 mg	Class III Facility
0.02 lb	0.010 mg	Class III Facility

Range	*Best Uncertainty (±)*[note 1]	*Remarks*
0.01 lb	0.007 mg	Class III Facility
0.005 lb	0.004 mg	Class III Facility
0.003 lb	0.003 mg	Class III Facility
0.002 lb	0.003 mg	Class III Facility
0.001 lb	0.003 mg	Class III Facility
4 oz	0.045 mg	Class III Facility
2 oz	0.025 mg	Class III Facility
1 oz	0.027 mg	Class III Facility
1/2 oz	0.016 mg	Class III Facility
1/4 oz	0.010 mg	Class III Facility
1/8 oz	0.008 mg	Class III Facility
1/16 oz	0.008 mg	Class III Facility
1/32 oz	0.008 mg	Class III Facility

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1. Represents an expanded uncertainty using a coverage factor, k=2

NVLAP LAB CODE 105002-0

SANDIA NATIONAL LABORATORIES
Primary Electrical Standard Dept. 1542
P.O. Box 5800, Mail Stop 0665
Albuquerque, NM 87185-0665
Contact: Dr. Richard B. Pettit
Phone: 505-844-6242 Fax: 505-844-4372
E-Mail: rbpetti@sandia.gov
URL: http://www.sandia.gov/psl

Accreditation Valid Through: December 31, 1999

DIMENSIONAL

NVLAP Code: 20/D01
Angular

Range	*Best Uncertainty (±) in percent*^{note 1}	*Remarks*
Angle Blocks	0.60 arc second	Standard Sizes, 1 arc second to 45°
Optical Squares	0.46 arc second	
True Squares	0.28 arc second	

NVLAP Code: 20/D03
Gage Blocks

Range	*Best Uncertainty (±) in percent*$^{note\ 1,8}$	*Remarks*
to 100 mm (4 in)	30 nm + 0.14 L	Interferometry with Historical Analysis
to 100 mm (4 in)	34 nm + 0.33 L	Interferometry, single wiring
<1 mm (.04 in)	41 nm	Mechanical Comparison to Masters$^{note\ 2,3,4}$
1 to 100 mm (.04 to 4 in)	35 nm + 0.59 L	Mechanical Comparison to Masters$^{note\ 2,3,4}$
125 to 500 mm (5 to 20 in)	127 nm + 0.30 L	Mechanical Comparison to Masters$^{note\ 2,3,4}$

DC/LOW FREQUENCY

NVLAP Code: 20/E01
Voltage Converters

Best Uncertainty (±)in ppm$^{note\ 1}$

Frequency in Hertz

Range	*10*	*100*	*1 k*	*20 k*	*50 k*	*100 k*	*200 k*	*500 k*	*1 M*
1 V	102	20	23	17	26	42	71	73	75
2 V	101	18	17	21	27	42	72	71	73
3 V	102	16	18	17	27	42	71	73	75
4 V	101	17	17	19	30	42	71	71	72
6 V	101	16	16	17	27	41	72	74	76
10 V	101	16	18	18	27	41	72	73	74
12 V	101	18	18	16	27	42	72	72	73
20 V	104	19	16	17	30	41	72	76	78
30 V	102	17	16	16	27	42	71	76	77
40 V	101	17	16	19	27	41	73	76	77
60 V	101	23	16	17	27	42	71	71	74
100 V	101	19	16	17	28	43	73	75	75
120 V	102	22	21	22	31	52			
200 V	101	23	22	24	32	51			
300 V	103	29	25	25	34	56			
400 V	102	21	22	22	32	59			
600 V	102	23	22	21	33	57			
1000 V	104	31	29	31	43	69			

NVLAP Code: 20/E01
AC Current Shunts

Range	*Frequency*	*Best Uncertainty (±) in percent*$^{note\ 1}$
10 mA	50 kHz	0.010
25 mA	50 kHz	0.010
50 mA	50 kHz	0.010
100 mA	50 kHz	0.014
250 mA	50 kHz	0.010
500 mA	50 kHz	0.011
1 A	50 kHz	0.011
1 A	100 kHz	0.014
2.5 A	50 kHz	0.011

(See 'How To Use This Directory' on page 7.)

Range	*Frequency*	*Best Uncertainty (±) in percent*[note 1]
5 A	50 Hz	0.009
5 A	60 Hz	0.009
5 A	50 kHz	0.011
10 A	50 kHz	0.017
20 A	50 Hz	0.013
20 A	400 Hz	0.013
20 A	1 kHz	0.013
20 A	50 kHz	0.017

NVLAP Code: 20/E03
Capacitance Dividers - Pulsed High-Voltage Condition

Range	*Best Uncertainty (±) in percent*[note 1]	*Remarks*
1 to 350 kV	2.0	1 to 30 μs Pulse

NVLAP Code: 20/E05
DC Resistance

Range in ohms	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
0.0001 to 0.001	11	Low Resistance
0.001 to 0.01	4	Low Resistance
0.01 to 0.1	2.5	Low Resistance
0.1 to 1	2	Low Resistance
1	0.057	Thomas
1 to 10	1	
10 to 10^4	0.5	
10 k	0.15	SR104
10^5	2	
10^6	3	
10^7	5	
10^8	10	
10^8	240	with Teraohmeter
10^9	330	with Teraohmeter
10^{10}	470	with Teraohmeter
10^{11}	670	with Teraohmeter
10^{12}	1400	with Teraohmeter

Range in ohms	*Best Uncertainty (±) in ppm*$^{note\ 1}$	*Remarks*
10^{13}	2000	with Teraohmeter
10^{14}	3300	with Teraohmeter
10^{15}	6700	with Teraohmeter
10^{16}	7.0%	with Teraohmeter
Special Resisters		
2 and 5	0.5	Reichsanstalt
25 and 100	0.15	Tinsley
28.5	0.5	NBS
Shunts		
100 mA to 1000 A	2.5	

NVLAP Code: 20/E06
DC Voltage

Range	*Best Uncertainty (±) in ppm*$^{note\ 1}$	*Remarks*
1, 1.018 V	0.14	Josephson Array System
10.0 V	0.017	Josephson Array System
1.018 V	0.21	Standard Cell System
1.0 to 10.0 V	0.26	Zener Ref. System
Voltage dividers - Potentiometer combination		
1.5 V to 1500 V	2.5	Intermediate System
x1.0 range to 1.05 V	0.5 of reading +0.1 μV	Potentiometer only,k=3
x1.0 range above 1.05 V	1.0 of reading +0.1 μV	Potentiometer only,k=3
x0.1 range	1.5 of reading +0.01 μV	Potentiometer only,k=3
x0.01 range	2.5 of reading +0.005 μV	Potentiometer only,k=3
High Voltage		
to 100 kV	106	200 kV system
100 kV to 200 kV	140	200 kV system
to 10 kV	0.2%	10 kV system

Ratio/Bridges		
1:1 to 1:100,000	0.5 x 10^7 (ratio)	For ratio based on 20 step first dial (k=3). For bridges, uncertainty combines ratio and resistance uncertainties

NVLAP Code: 20/E08
Inductive Dividers

Range	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
15, 35 and 100 V	55	@ 60,1 k and 10 kHz

NVLAP Code: 20/E10
LF Capacitance

Range	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
0.01 to 1000 pF	5	@ 1 kHz

NVLAP Code: 20/E11
LF Inductance

	Best Uncertainty (±) in percent[note 1]		
Range	*Frequency in Hz*		
	100	*1 k*	*10 k*
10 μH	1.10	0.20	0.20
20 μH	0.50	0.20	0.20
50 μH	0.20	0.20	0.20
100 μH	0.10	0.10	0.10
200 μH	0.10	0.10	0.10
500 μH	0.02	0.02	0.05
1 mH	0.02	0.02	0.06
2 mH	0.03	0.03	0.06
5 mH	0.03	0.03	0.06
10 mH	0.02	0.02	0.05
20 mH	0.02	0.02	0.05
50 mH	0.02	0.02	0.05
100 mH	0.02	0.02	0.05
200 mH	0.02	0.02	
500 mH	0.02	0.02	
1 H	0.02	0.05	
2 H	0.02	0.05	

Range	*100*	*1 k*
5 H	0.02	0.10
10 H	0.02	0.20

NVLAP Code: 20/E18
Resistive Dividers - Pulsed High-Voltage Condition

Range	*Best Uncertainty (±) in percent*[note 1]	*Remarks*
1 to 350 kV	1.0	1 to 30 μs Pulse

TIME AND FREQUENCY

NVLAP Code: 20/F01
Frequency Dissemination

Range	*Best Uncertainty (±)*[note 1]	*Remarks*
0.1 MHz	1 part in 10^{12}	
1 MHz	1 part in 10^{12}	
5 MHz	1 part in 10^{12}	
10 MHZ	1 part in 10^{12}	

IONIZING RADIATION

NVLAP Code: 20/I04
Radioactive Sources

Range	*Best Uncertainty (±)*[note 1]	*Remarks*
Alpha Emission Rate		
1 to 2 x 10^5 /s into 2π	1.6 %	
Beta Emission Rate		
50 to 5000 /s into 2π	5.0 %	
Alpha Energy		
3 to 8 MeV	30 keV	

MECHANICAL

NVLAP Code: 20/M06
Force

Range	*Best Uncertainty (±) in percent*[note 1, 2, 6]	*Remarks*
100 to 1,000	0.0052	Primary Standard (Deadweight)
1,000 to 100,000	0.016	Secondary Standards (Proving Rings)
50 to 30,000	0.075	Secondary Standards (Load Cells)[note 7]

RF MICROWAVE

NVLAP Code: 20/R05
HF Capacitance

Best Uncertainty (±) in percent[note 1]

Frequency in Hz

Range in pF	*100*	*1 k*	*10 k*	*100 k*	*1 M*
0.01		0.20		1.3	
0.1		0.05		1.3	
1		0.02		0.04	
10		0.01		0.02	
100		0.01		0.01	
1000		0.01		0.03	
1		0.02		0.2	0.30
2		0.02		0.35	0.60
5		0.02		0.22	0.26
10		0.10		0.14	0.15
20		0.10		0.13	0.11
50				0.03	0.02
100				0.02	0.02
200				0.01	0.01
500				0.02	0.01
1000				0.02	0.03
10		0.0001			
100		0.0001			
1	0.01	0.01	0.01	0.01	0.01
10	0.01	0.01	0.01	0.01	0.01
100	0.01	0.01	0.01	0.01	0.01
1000	0.01	0.01	0.01	0.01	0.01

NVLAP Code: 20/R06
HF Inductance

		Best Uncertainty (±) in percent[note 1]		
		Frequency in Hz		
Range	*10 k*	*100 k*	*1 M*	*10 M*
0.1 μH		2.19	4.00	
0.2 μH		2.03	2.03	
0.5 μH		0.80	1.20	
1.0 μH		0.56	0.92	
2.0 μH		0.31	0.73	
5.0 μH		0.25	0.68	
10 μH		0.39	0.63	
25 μH		0.32	0.16	
50 μH		0.26	0.12	
100 μH		0.24	0.11	
250 μH		0.32	0.16	
500 μH		0.26	0.09	
1 mH		0.24		
2.5 mH		0.25		
5 mH		0.24		
10 mH		0.29		
25 mH		0.25		
0.25 μH	1.2	1.4	1.7	0.8
1 μH	0.4	0.5	0.9	0.6
10 μH	0.4	0.4	0.6	0.1
100 μH	0.2	0.2	0.2	

NVLAP Code: 20/R10
Q Standards

Range	*Best Uncertainty (±) in percent*[note 1]	*Remarks*
Selected values from 95 to 607	1.2 to 4.5 dependent on Q value and frequency	frequency range 50 kHz to 45 MHz

NVLAP Code: 20/R11
RF-DC Voltage Converter

High Frequency TVC

Best Uncertainty (±) in percent[note 1]

Frequency in Hz

Range	*1 M*	*10 M*	*30 M*	*50 M*	*100 M*
0.5 V	0.06	0.11	0.21	0.51	1.1
1 V	0.06	0.11	0.21	0.51	1.1
2 V	0.06	0.11	0.21	0.51	1.1
2.5 V	0.06	0.11	0.21	0.51	1.1
3 V	0.06	0.11	0.21	0.51	1.1
5 V	0.06	0.11	0.21		1.1
10 V	0.06	0.11	0.21		1.1
20 V	0.06	0.11	0.21		1.1
50 V	0.06	0.11	0.22		1.2
100 V	0.06	0.11	0.27		1.5
200 V	0.06	0.12	0.21		1.1

RF TVC

Best Uncertainty (±) in percent[note 1]

Frequency in Hz

Range	*300 M*	*600 M*	*700 M*	*800 M*	*900 M*	*1000 M*
1 V	1.3	1.3	1.3	1.3	1.3	1.3
2.4 V	1.3	1.3	1.3	1.3	1.3	1.3
7 V	1.3	1.3	1.3	1.3	1.3	1.3

Micropotentiometers

Best Uncertainty (±) in percent[note 1]

Frequency in Hz

Range	*30 M*	*100 M*	*300 M*	*600 M*	*900 M*
0.1 mV	2.32	3.56	3.36	5.10	5.10
0.2 mV	0.54	1.04	1.02	1.35	1.42
0.4 mV	2.34	3.44	3.18	5.10	5.10
0.9 mV	0.54	1.04	1.05	1.35	1.44
1 mV	2.24	3.33	3.21	5.10	5.10

	Best Uncertainty (±) in percent[note 1]				
	Frequency in Hz				
Range	*30 M*	*100 M*	*300 M*	*600 M*	*900 M*
1.5 mV	0.59	1.02	1.02	1.33	1.33
4 mV	0.53	1.07	1.21	1.38	1.39
5 mV	2.24	3.16	3.17	5.10	5.10
10 mV	2.27	3.19	3.16	5.10	5.10
11 mV	2.25	3.17	3.58	5.10	5.10
25 mV	0.48	0.97	0.97	1.28	1.30
28.5 mV	2.52	3.49	3.95	5.10	
102 mV	0.53	0.99	1.08	1.30	1.28
150 mV	0.43	0.99	1.06	1.32	1.28
320 mV	2.24	3.23	3.18	5.10	5.10
330 mV	0.45	1.01	0.98	1.38	1.29

NVLAP Code: 20/R12
RF/Microwave Bolometer Units

Expanded Uncertainties[note 1,2,3] on Effective Efficiency & Calibration Factor of HP bolometric power sensors.

			Frequency (MHz)			
Connector Type	*Quantity*	*Quantity Range*	*50-2000*	*2000-8000*	*8000-12000*	*12000-18000*
N	Calibration Factor	0.9 to 1	0.004-0.006	0.004-0.006	0.005-0.007	0.006-0.008
APC-3.5	Calibration Factor	0.9 to 1	-------	0.007-0.009	0.009-0.010	0.010-0.011
N	Effective Efficiency	0.9 to 1	0.004-0.005	0.004-0.005	0.005-0.006	0.006-0.008
APC-3.5	Effective Efficiency	0.9 to 1	-------	0.007-0.008	0.008-0.009	0.009-0.010

NVLAP Code: 20/R13
RF/Microwave Attenuators

Reflection Coefficient (or Scattering Parameter Sii)

A. Dual 6-Port Network Analyzer Certification Uncertainties *note 2,3,4*

			Frequency (MHz)			
Connector Type	*Quantity*	*Quantity Range*	*50-2000*	*2000-8000*	*8000-12000*	*12000-18000*
GR-900	$\lvert S_{ii} \rvert$	0 to 1	0.002-0.009	0.002-0.015	------	------
N	$\lvert S_{ii} \rvert$	0 to 1	0.002-0.008	0.002-0.027	0.006-0.018	0.006-0.030
APC-7	$\lvert S_{ii} \rvert$	0 to 1	0.002-0.006	0.002-0.009	0.003-0.018	0.005-0.015
APC-3.5	$\lvert S_{ii} \rvert$	0 to 1	0.002-0.012	0.002-0.015	0.005-0.019	0.012-0.050
GR-900	$\mathrm{Arg}(S_{ii})$	$0 < \lvert S_{ii} \rvert < 1$ -180 to +180 deg	0.120-180.0	0.019-180.0	------	------
N	$\mathrm{Arg}(S_{ii})$	$0 < \lvert S_{ii} \rvert < 1$ -180 to +180 deg	0.360-180.0	0.300-180.0	0.600-180.0	0.800-180.0
APC-7	$\mathrm{Arg}(S_{ii})$	$0 < \lvert S_{ii} \rvert < 1$ -180 to +180 deg	0.012-180.0	0.200-180.0	0.540-180.0	0.525-180.0
APC-3.5	$\mathrm{Arg}(S_{ii})$	$0 < \lvert S_{ii} \rvert < 1$ -180 to +180 deg	0.360-180.0	0.240-180.0	0.540-180.0	0.560-180.0

B. HP8510 Vector Network Analyzer Uncertainties

1. Expanded Uncertainties *note 1,2,3* on one or two-port devices

			Frequency (MHz)			
Connector Type	*Quantity*	*Quantity Range*	*50-2000*	*2000-8000*	*8000-12000*	*12000-18000*
N	$\lvert S_{ii} \rvert$	0 to 1	0.001-0.003	0.001-0.009	0.004-0.009	0.004-0.021
APC-7	$\lvert S_{ii} \rvert$	0 to 1	0.001-0.007	0.001-0.003	0.003-0.007	0.001-0.004
APC-3.5	$\lvert S_{ii} \rvert$	0 to 1	0.001-0.007	0.004-0.020	0.004-0.020	0.004-0.020
N	$\mathrm{Arg}(S_{ii})$	$0 < \lvert S_{ii} \rvert < 1$ -180 to +180 deg	0.05-180	0.36-180	1.43-180	1.34-180
APC-7	$\mathrm{Arg}(S_{ii})$	$0 < \lvert S_{ii} \rvert < 1$ -180 to +180 deg	0.15-180	0.16-180	0.33-180	0.38-180
APC-3.5	$\mathrm{Arg}(S_{ii})$	$0 < \lvert S_{ii} \rvert < 1$ -180 to +180 deg	0.53-180	0.33-180	0.35-180	0.33-180

2. Certification Uncertainties [note 2,3,4] on three-port devices

Connector Type	*Quantity*	*Quantity Range*	*Frequency (MHz)* *50-2000*	 *2000-8000*	 *8000-12000*	 *12000-18000*
N, APC-7, APC-3.5	$\|S_{ii}\|$	0 to 0.3	0.011 - 0.075	0.011 - 0.075	0.03 - 0.09	0.050 - 0.092
N, APC-7, APC-3.5	$\|\Gamma_{ge}\|$	0 to 0.3	0.011 - 0.080	0.012 - 0.080	0.030 - 0.084	0.071 - 0.119

C. HP8753 Vector Network Analyzer Certification Uncertainties [note 2,3,4]

1. One or two-port devices

Connector Type	*Quantity*	*Quantity Range*	*25-1000*	*1000-3000*
N	$\|S_{ii}\|$	0 to 1	0.001-0.009	0.003-0.016
APC-7	$\|S_{ii}\|$	0 to 1	0.002-0.04	0.002-0.004
APC-3.5	$\|S_{ii}\|$	0 to 1	0.006-0.02	0.006-0.035
N	Arg(S_{ii})	$0<\|S_{ii}\|<1$ -180 to +180 deg	0.2-70	1-180
APC-7	Arg(S_{ii})	$0<\|S_{ii}\|<1$ -180 to +180 deg	0.3-180	0.2-25
APC-3.5	Arg(S_{ii})	$0<\|S_{ii}\|<1$ -180 to +180 deg	1-180	1.6-180

2. Three-port devices

Connector Type	*Quantity*	*Quantity Range*	*25-1000 (MHz)*
N, APC-7-APC-3.5	$\|S_{ii}\|$	0 to 0.3	0.011 - 0.020
N, APC-7-APC-3.5	$\|\Gamma_{ge}\|$	0 to 0.3	0.01 - 0.03

D. Weinschel VM-4B Certification Uncertainties [note 2,3,4]

Connector Type	*Quantity*	*Quantity Range*	*Frequency (MHz)* *10-2000*	 *2000-8000*	 *8000-12000*	 *12000-18000*
N	$\|S_{ii}\|$	0 to 1	0.025-0.080	0.031-0.085	0.040-0.090	0.046-0.112
APC-7	$\|S_{ii}\|$	0 to 1	0.011-0.075	0.015-0.080	0.030-0.085	0.036-0.106
BNC	$\|S_{ii}\|$	0 to 1	0.026-0.060 [note 5]	-------	-------	-------

Attenuation (or Scattering Parameter Sij)

A. Dual 6-Port Network Analyzer Certification Uncertainties [note 2,3,4]

			Frequency (MHz)			
Connector Type	*Quantity*	*Quantity Range*	*50-2000*	*2000-8000*	*8000-12000*	*12000-18000*
GR-900	$\|S_{ij}\|$	0 to 60 dB	0.012-0.390	0.015-0.410	-------	-------
N	$\|S_{ij}\|$	0 to 60 dB	0.012-0.390	0.015-0.410	0.018-0.410	0.021-0.900
APC-7	$\|S_{ij}\|$	0 to 60 dB	0.012-0.390	0.015-0.410	0.020-0.410	0.021-0.900
APC-3.5	$\|S_{ij}\|$	0 to 60 dB	0.012-0.150	0.015-0.410	0.020-0.410	0.030-0.90

B. HP8510 Vector Network Analyzer Uncertainties

1. Expanded Uncertainties[note 1,2,3] on one or two-port devices

			Frequency (MHz)			
Connector Type	*Quantity*	*Quantity Range*	*50-2000*	*2000-8000*	*8000-12000*	*12000-18000*
N	$\|S_{ij}\|$	0 to 60 dB	0.01-0.12	0.02-0.17	0.03-0.25	0.03-0.48
APC-7	$\|S_{ij}\|$	0 to 60 dB	0.01-0.08	0.01-0.13	0.01-0.13	0.01-0.18
APC-3.5	$\|S_{ij}\|$	0 to 60 dB	0.01-0.12	0.02-0.22	0.04-0.25	0.05-0.49
N	Arg(S_{ij})	$0<\|S_{ij}\|<60$ dB 0 to 360 deg	0.22-1.19	0.32-1.27	0.36-1.84	0.58-3.46
APC-7	Arg(S_{ij})	$0<\|S_{ij}\|<60$ dB 0 to 360 deg	0.22-0.73	0.25-1.21	0.41-1.70	0.57-2.85
APC-3.5	Arg(S_{ij})	$0<\|S_{ij}\|<60$ dB 0 to 360 deg	0.45-0.80	0.35-1.39	0.41-1.94	0.66-3.17

2. Certification Uncertainties [note 2,3,4] on three-port devices

			Frequency (MHz)			
Connector Type	*Quantity*	*Quantity Range*	*50-2000*	*2000-8000*	*8000-12000*	*12000-18000*
N, APC-7, APC-3.5	|Coupling| (dB)	3-40 dB	0.071 - 0.320	0.110 - 0.500	0.012 - 0.500	0.320 - 0.600
N, APC-7, APC-3.5	|Mainline| (dB)	0 to 8 dB	0.020 - 0.221	0.020 - 0.221	0.020 - 0.221	0.131 - .290
N, APC-7 APC-3.5	|Directivity| (dB)	15-25 dB	0.19 - 9.2	0.53 - 9.2	0.80 - 9.2	1.55 - 9.2
N, APC-7, APC-3.5	|Directivity| (dB)	30-40 dB	1.0 - ∞	2.6 - ∞	5.7 - ∞	7.2 - ∞

C. HP8753 Vector Network Analyzer Certification Uncertainties[note 2,3,4]

1. One or two-port devices

Connector Type	*Quantity*	*Quantity Range*	*Frequency (MHz)*	
			25-1000	***1000-3000***
N	$\|S_{ij}\|$	0 to 60 dB	0.003-0.5	0.004-1.2
APC-7	$\|S_{ij}\|$	0 to 60 dB	0.002-0.6	0.003-0.9
APC-3.5	$\|S_{ij}\|$	0 to 60 dB	0.003-0.6	0.003-1.0
APC-3.5	Arg(S_{ij})	$0<\|S_{ij}\|<60$ dB 0 to 360 deg	0.4-10	0.4-10

2. Three-port devices

Connector Type	*Quantity*	*Quantity Range*	***25-1000 (MHz)***
N, APC-7-APC-3.5	|Coupling| (dB)	3-20 dB	0.050 - 0.230
N, APC-7-APC-3.5	|Mainline| (dB)	0 to 8 dB	0.020 - 0.050
N, APC-7-APC-3.5	|Directivity| (dB)	15-25 dB	0.9 - 3.8
N, APC-7-APC-3.5	|Directivity| (dB)	30-40 dB	4 - ∞

D. Weinschel VM-4B Certification Uncertainties [note 2,3,4] on Attenuation

Connector Type	*Quantity*	*Quantity Range*	*Frequency (MHz)*			
			10-2000	***2000-8000***	***8000-12000***	***12000-18000***
N	$\|S_{ij}\|$	0 to 100 dB	0.06-0.60	0.10-1.10	0.25-1.52	0.38-1.80
APC-7	$\|S_{ij}\|$	0 to 100 dB	0.06-0.60	0.10-1.00	0.20-1.43	0.30-1.75
BNC	$\|S_{ij}\|$	0 to 100 dB	0.10-0.90[note 5]	------	------	------

E. Power Ratio Attenuation Expanded Uncertainties[note 1,2,3]

Connector Type	*Quantity*	*Quantity Range*	*Frequency (MHz)*			
			10-2000	***2000-8000***	***8000-12000***	***12000-18000***
Fixed Attenuators or Step/Variable Attenuators						
N, APC-7 APC-3.5	$\|S_{ij}\|$	0 to 11 dB	0.008-0.014 + Mismatch Unc.	0.014-0.016 + Mismatch Unc.	0.013-0.015 + Mismatch Unc.	0.015-0.018 + Mismatch Unc.
Isolated Step/Variable Attenuators						
N, APC-7 APC-3.5	$\|S_{ij}\|$	0 to 11 dB	0.008-0.014	0.014-0.016	0.013-0.015	0.015-0.018

NVLAP Code: 20/R16
Group Delay Certification Uncertainties^note 2,3,4^

Connector Type	*Typical Atten. (dB)*	*Delay (ns)*	*50-1000 (MHz)*
APC-7, N, APC-3.5	0.08	5	0.02 - 0.05
APC-7, N, APC-3.5	0.21	15	0.04 - 0.13
APC-7, N, APC-3.5	0.8	50	0.05 - 0.12
APC-7, N, APC-3.5	3	200	0.15 - 0.41
APC-7, N, APC-3.5	2.2	385	0.46 - 0.50

NVLAP Code: 20/R17
RF/Microwave Power Meters

CW Power Certification Uncertainties^note 2,3,4^

A. Low to Medium Power CW Microwave Power Meter Calibration at Type N Connector

			Frequency (MHz)		
Quantity	*Quantity Range*	*1 to 2000*	*2000 to 4000*	*4000 to 12400*	*12400 to 16500*
Power (dBm)	-30 to -10	.09 to .41 dB	.13 to .41 dB	.14 to .34 dB	.16 to .46 dB
Power (dBm)	-10 to 10	.06 to .27 dB	.10 to .25 dB	.11 to .30 dB	------
Power (dBm)	10 to 30	.06 to .25 dB	.10 to .21 dB	.11 to .24 dB	------

B. Low Power, Wide Range, CW Microwave Power Meter Calibration at Type N Connector

			Frequency (MHz)	
Quantity	*Quantity Range*	*30 to 4000*	*4000 to 8000*	*8000 to 12400*
Power (dBm)	-60 to -50	0.20 to 0.41 dB	0.25 to 0.43 dB	0.24 to 0.43 dB
Power (dBm)	-50 to -40	0.18 to 0.29 dB	0.23 to 0.35 dB	0.22 to 0.35 dB
Power (dBm)	-40 to -30	0.14 to 0.25 dB	0.16 to 0.32 dB	0.20 to 0.32 dB
Power (dBm)	-30 to -20	0.14 to 0.23 dB	0.16 to 0.27 dB	0.18 to 0.27 dB

C. Medium Power CW Microwave Power Meter Calibration at Type N Connector

			Frequency (MHz)	
Quantity	*Quantity Range*	*12 to 1000*	*240*	*2000 to 2500*
Power (mW)	1 to 10	1.7 to 3.3%	------	------
Power (mW)	1 to 100	------	------	3.1 to 4.3%
Power (mW)	80 to 160	------	1.9 to 2.4%	------

D. Medium Power CW Microwave Power Meter Calibrations at APC-3.5 Connector

		Frequency (MHz)		
Quantity	*Quantity Range*	*2000 to 4000*	*4000 to 8000*	*8000 to 18000*
Power (mW)	0.1 to 8	2.8 to 4.0%	3.0 to 4.9%	4.0 to 5.8%

E. High Power CW Microwave Power Meter Calibrations at Type N Connector

		Frequency (MHz)	
Quantity	*Quantity Range*	*13.6 to 300*	*300 to 3000*
Power (Watts)	0.2 to 10	9.0 to 9.1%	3.3 to 10.6%
Power (Watts)	10 to 200	4.4 to 10.1%	9.6 to 10.6%

Pulse Power Certification Uncertainties*note 2,3,4*

A. Pulse Power Meter Calibrations at Type N Connector

Quantity	*Quantity Range*	*2000*
Power (mW)	10 to 100	7.3 to 8.2%

THERMODYNAMICS

NVLAP Code: 20/T04
Leak Artifacts

Range	*Best Uncertainty (±) in percent*[note 1]	*Remarks*
Gas Leak - PΔV Technique		
1 x 10^{-7} moles/s	0.7	Total Gas Measurement
1 x 10^{-8} moles/s	0.9	Total Gas Measurement
1 x 10^{-9} moles/s	1.0	Total Gas Measurement
1 x 10^{-10} moles/s	1.0	Total Gas Measurement
Gas Leak - Accumulate - Dump Technique		
1 x 10^{-10} moles/s to 1 x 10^{-14} moles/s	1.0	1 to 200 Atomic Mass Units for any non-reactive, non-hazardous, non-radioactive gas
Gas Leak - Comparison Technique		
1 x 10^{-10} moles/s	2.5	Helium
1 x 10^{-11} moles/s	2.4	Helium
1 x 10^{-12} moles/s	2.3	Helium
1 x 10^{-13} moles/s	2.3	Helium
1 x 10^{-14} moles/s	7.0	Helium

THERMODYNAMICS

NVLAP Code: 20/T05
Pressure

Range	*Best Uncertainty (±) in ppm*$^{\text{note 1}}$	*Remarks*
Pneumatic Deadweight Piston Gauges (absolute mode) - Direct Pressure Comparison		
0.2 to 24 psia [≈1.4 to 170 kPa]	31	Nitrogen
2.0 to 70 psia [≈14 to 480 kPa]	28	Nitrogen
52 to 1000 psia [≈0.4 to 7.0 MPa]	46	Nitrogen
Pneumatic Deadweight Piston Gauges (gauge mode) - Direct Pressure Comparison		
0.2 to 24 psig [≈1.4 to 170 kPa]	29	Nitrogen
2.0 to 70 psig [≈14 to 480 kPa]	26	Nitrogen
52 to 1000 psig [≈0.4 to 7.0 MPa]	44	Nitrogen
Hydraulic Deadweight Piston Gauges (gauge mode) - Direct Pressure Comparison		
0.4 to 4.0 kpsig [≈2.8 to 28 MPa]	44	Oil
2.0 to 20 kpsig [≈14 to 140 MPa]	61	Oil
4.0 to 40 kpsig [≈28 to 280 MPa]	59	Oil
Pneumatic Deadweight Piston Gauges - Cross Float (effective area)		
0.2 to 24 psig [≈14 kPa to 170 kPa]	35	Nitrogen
2.0 to 70 psig [≈14 kPa to 480 kPa]	33	Nitrogen
52 to 1000 psig [≈0.4 MPa to 7.0 MPa]	46	Nitrogen
Hydraulic Deadweight Piston Gauges - Cross Float (effective area)		
0.4 to 4.0 kpsig [≈2.8 to 28 MPa]	46	Oil
2.0 to 20 kpsig [≈14 to 140 MPa]	67	Oil
4.0 to 40 kpsig [≈28 to 280 MPa]	61	Oil

Secondary Pressure
Low Range Absolute

Pressure	*Best Uncertainty (±) in psia*$^{\text{note 1}}$	*Remarks*
0.2 psia [≈1.4 kPa]	0.0013	Nitrogen
1.0 psia [≈7.0 kPa]	0.0013	Nitrogen
6.0 psia [≈41 kPa]	0.0017	Nitrogen
10 psia [≈70 kPa]	0.0021	Nitrogen
15 psia [≈100 kPa]	0.0028	Nitrogen

Secondary Pressure
Low Range Gauge or Absolute

Pressure	*Best Uncertainty (±) in psi*[note 1]	*Remarks*
20 psi [≈140 kPa]	0.009	Nitrogen
40 psi [≈280 kPa]	0.010	Nitrogen
60 psi [≈410 kPa]	0.011	Nitrogen
80 psi [≈550 kPa]	0.013	Nitrogen
100 psi [≈690 kPa}	0.014	Nitrogen

Secondary Pressure
Mid-Range Gauge or Absolute

Pressure	*Best Uncertainty (±) in psi*[note 1]	*Remarks*
200 psi [≈1.4 MPa]	0.137	Nitrogen
500 psi [≈3.4 MPa]	0.157	Nitrogen
1.0 kpsi [≈7.0 MPa]	0.201	Nitrogen
1.5 kpsi [≈10 MPa]	0.247	Nitrogen
2.0 kpsi [≈14 MPa]	0.280	Nitrogen

Secondary Pressure
High-Range Gauge or Absolute

4.0 kspi [≈28 MPa]	0.6	Nitrogen
6.0 kspi [≈41 MPa]	0.8	Nitrogen
8.0 kspi [≈55 MPa]	1.0	Nitrogen
10 kspi [≈70 MPa]	1.0	Nitrogen

THERMODYNAMICS

NVLAP Code: 20/T07
Resistance Thermometry

Temperature (°C)	*Best Uncertainty (±) in m °C*$^{note\ 1}$	*Material/ Equilibrium State*
-189.3442	0.53	Ar/Triple Point
-38.8344	0.30	Hg/Triple Point
0.01	0.16	H_20/Triple Point
29.7646	0.12	Ga/Melting Point
156.5985	2.00	In/Freezing Point
231.928	0.92	Sn/Freezing Point
419.527	1.10	Zn/Freezing Point
660.323	5.0	Al/Freezing Point
961.78	10.0	Ag/Freezing Point

Standard Platinum Resistance Thermometer Calibrations

-189.3442	1.1	Ar/Triple Point
-38.8344	0.6	Hg/Triple Point
0.01	0.6	H_20/Triple Point
29.7646	0.6	Ga/Melting Point
156.5985	2.6	In/Freezing Point
231.928	1.8	Sn/Freezing Point
419.527	2.0	Zn/Freezing Point
660.323	5.2	Al/Freezing Point
961.78	10.1	Ag/Freezing Point

Comparison Calibrations

Temperature Range (°C)	*Best Uncertainty (±) in °C*$^{note\ 1}$	*Type of Device*
-80 to 0	0.10	Thermocouples
10 to 150	0.10	Thermocouples
150 to 660	0.22	Thermocouples
660 to 700	0.47	Thermocouples
700 to 1100	2.5	Thermocouples
1100 to 1300	2.8	Thermocouples
-80 to 0	0.06	RTD/IPRT/PRT
10 to 150	0.09	RTD/IPRT/PRT

Temperature Range (°C)	*Best Uncertainty (±) in °C*[note 1]	*Type of Device*
150 to 660	0.21	RTD/IPRT/PRT
-80 to 0	0.05	Liquid in Glass
10 to 150	0.06	Liquid in Glass
-80 to 0	0.06	Thermistors
10 to 150	0.09	Thermistors
150 to 250	0.21	Thermistors

Thermocouple Simulator/Readout Calibration Methods

Type	*ITS-90 Temperature Range (°C)*	*Best Uncertainty (±) in °C*[note 1,9]	*NIST Monograph 175 Reference Table*[note 10]
K	-200 TO 1370	0.10 to 0.30	7.3.3
J	-200 to 1200	0.08 to 0.22	6.3.3
E	-240 to 1000	0.07 to 0.38	5.3.3
T	-240 to 400	0.09 to 0.53	9.3.3
R	-50 to 1750	0.38 to 1.09	3.3.3
S	-50 to 1750	0.43 to 1.02	4.3.3
B	100 to 1750	0.43 to 4.45	2.3.3
C	0 to 2300	0.24 to 0.82	

THERMODYNAMICS
NVLAP Code: 20/T10
Vacuum

Range	*Best Uncertainty (±) in percent* [note 1]	*Remarks*
Ionization Gage Reference for direct comparison		
1.3 x 10^{-6} Pa < reading ≤ 1.3 x 10^{-5} Pa	4.8	N_2; 10^{-8} torr
1.3 x 10^{-5} Pa < reading ≤ 1.3 x 10^{-4} Pa	4.7	N_2; 10^{-7} torr
1.3 x 10^{-4} Pa < reading ≤ 1.3 x 10^{-3} Pa	4.7 - 2.5	N_2; 10^{-6} torr
Spinning Rotor Gage Reference for direct comparison		
1.3 x 10^{-4} Pa < reading ≤ 1.3 x 10^{-3} Pa	4.3 - 2-1	N_2; 10^{-6} torr
1.3 x 10^{-3} Pa < reading ≤ 1.3 Pa	2.1	N^2; 10^{-5} torr - 10^{-3} torr
1.3 Pa ≤ reading ≤ 13 Pa	2.2	N_2; 10^{-3} torr

Range	*Best Uncertainty (±) in percent* [note 1]	*Remarks*
Capacitance Diaphragm Gages Reference for direct comparison		
1.3×10^{-1} Pa ≤ reading ≤ 13.3 Pa	2.1 - 0.7	N_2; 0.1 torr range
13.3 Pa ≤ reading ≤ 133.3 Pa	0.7	N_2; 1 torr range
133.3 Pa ≤ reading ≤ 1.3 kPa	0.4	N_2; 10 torr range
1.3 kPa ≤ reading ≤ 13.3 kPa	0.2	N_2; 100 torr range
13.3 kPa ≤ reading ≤ 133.3 kPa	0.6 to 0.1	N_2; 1000 torr range
Secondary Capacitance Diaphragm Gages Reference for direct comparison		
1.3×10^{-1} Pa ≤ reading ≤ 13.3 Pa	2.2 to 0.9	N_2; 0.1 torr range
13.3 Pa ≤ reading ≤ 133.3 Pa	1.1	N_2; 1 torr range
133.3 Pa ≤ reading ≤ 1.3 kPa	0.5	N_2; 10 torr range
1.3 kPa ≤ reading ≤ 13.3 kPa	0.5	N_2; 100 torr range
13.3 kPa ≤ reading ≤ 13.3 kPa	0.59 to 0.11	N_2; 1000 torr range

---

1. Expanded uncertainty with coverage factor of k=2, unless otherwise specified.
2. Approximate value. Actual value determined by test results.
3. The uncertainty ranges are the lowest and highest uncertainty values within the specified frequency range and quantity range.
4. Uncertainty consists of an appropriate combination of the measurement uncertainty (which includes all significant sources of uncertainty associated with the calibration process) and uncertainties due to use, environment, handling or variation with time over the certification interval.
5. Maximum frequency for BNC is 1000 MHz.
6. ASTM loading range classes (e.g., A, AA) are not used or reported.
7. Calibrations to 30,000 lbf versus load cells can be automated; other calibrations are manual.
8. Uncertainties listed are linearized forms (A'+B'L) of uncertainties calculated as root sum squares of constant and length-dependent terms $\{A^2+(BL)^2\}^{1/2}$. A' and B' are calculated by fitting a straight line through the RSS uncertainty values at the upper and lower limits of range.
9. Uncertainty is dependent on the specific temperature point tested.
10. Referenced tables in NIST Monograph 175 (April, 1993) provide values for emf E output/input of the thermocouple simulator/readout and the Seebeck coefficient S for the specific temperature points within the specified ranges. The best uncertainty (at k=2) of the emf E in μV is equal to the product of $U * S$, where U is the best uncertainty (at k=2) of the temperature point tested.

NVLAP LAB CODE 105003-0

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Accreditation Valid Through: December 31, 1999

MECHANICAL
NVLAP Code: 20/M08
Mass

Range	*Best Uncertainty (±)*[note 1]	*Remarks*
1000 kg	10377 mg	Equal Arm Balance
500 kg	5069 mg	Equal Arm Balance
300 kg	3200 mg	Equal Arm Balance
200 kg	2258 mg	Equal Arm Balance
100 kg	1299 mg	Equal Arm Balance
50 kg	99.7 mg	Double Substitution
30 kg	63.0 mg	Double Substitution
20 kg	44.6 mg	Double Substitution
10 kg	1.634 mg	Double Substitution
5 kg	0.247 mg	Double Substitution
3 kg	0.156 mg	Double Substitution
2 kg	0.106 mg	Double Substitution
1 kg	0.036 mg	Double Substitution
500 g	0.021 mg	Double Substitution
300 g	0.016 mg	Double Substitution
200 g	0.014 mg	Double Substitution
100 g	0.014 mg	Double Substitution
50 g	0.0097 mg	Double Substitution
30 g	0.0072 mg	Double Substitution
20 g	0.0063 mg	Double Substitution
10 g	0.0068 mg	Double Substitution
5 g	0.0036 mg	Double Substitution
3 g	0.0024 mg	Double Substitution
2 g	0.0018 mg	Double Substitution

Range	*Best Uncertainty (±)*[note 1]	*Remarks*
1 g	0.0016 mg	Double Substitution
500 mg	0.00088 mg	Double Substitution
300 mg	0.00060 mg	Double Substitution
200 mg	0.00048 mg	Double Substitution
100 mg	0.00048 mg	Double Substitution
50 mg	0.00050 mg	Double Substitution
30 mg	0.00046 mg	Double Substitution
20 mg	0.00046 mg	Double Substitution
10 mg	0.00054 mg	Double Substitution
5 mg	0.00034 mg	Double Substitution
3 mg	0.00028 mg	Double Substitution
2 mg	0.00024 mg	Double Substitution
1 mg	0.00028 mg	Double Substitution
1000 kg	23203 mg	Tolerance Test
500 kg	11335 mg	Tolerance Test
300 kg	7155 mg	Tolerance Test
200 kg	5049 mg	Tolerance Test
100 kg	2904 mg	Tolerance Test
50 kg	222.8 mg	Tolerance Test
30 kg	140.9 mg	Tolerance Test
20 kg	99.6 mg	Tolerance Test
10 kg	32.18 mg	Tolerance Test
5 kg	1.65 mg	Tolerance Test
3 kg	1.61 mg	Tolerance Test
2 kg	1.59 mg	Tolerance Test
1 kg	1.58 mg	Tolerance Test
500 g	1.58 mg	Tolerance Test
300 g	1.58 mg	Tolerance Test
200 g	0.031 mg	Tolerance Test
100 g	0.032 mg	Tolerance Test
50 g	0.024 mg	Tolerance Test
30 g	0.020 mg	Tolerance Test
20 g	0.019 mg	Tolerance Test

Range	*Best Uncertainty (±)^note 1^*	*Remarks*
10 g	0.020 mg	Tolerance Test
5 g	0.016 mg	Tolerance Test
3 g	0.015 mg	Tolerance Test
2 g	0.015 mg	Tolerance Test
1 g	0.015 mg	Tolerance Test
500 mg	0.0147 mg	Tolerance Test
300 mg	0.0146 mg	Tolerance Test
200 mg	0.0146 mg	Tolerance Test
100 mg	0.0146 mg	Tolerance Test
50 mg	0.0146 mg	Tolerance Test
30 mg	0.0146 mg	Tolerance Test
20 mg	0.0146 mg	Tolerance Test
10 mg	0.0146 mg	Tolerance Test
5 mg	0.0146 mg	Tolerance Test
3 mg	0.0146 mg	Tolerance Test
2 mg	0.0146 mg	Tolerance Test
1 mg	0.0146 mg	Tolerance Test

DIMENSIONAL

NVLAP Code: 20/D13
Surveying Rods and Tapes

1 - 12 in	0.004 in	Rigid Rules (Comparison to Standard)
13 - 24 in	0.008 in	Rigid Rules (Comparison to Standard)
1 - 10 ft	0.0042 ft	Metal Tapes (Bench Method)
20 ft	0.0055 ft	Metal Tapes (Bench Method)
30 ft	0.0067 ft	Metal Tapes (Bench Method)
40 ft	0.0082 ft	Metal Tapes (Bench Method)
50 ft	0.0095 ft	Metal Tapes (Bench Method)
60 ft	0.0110 ft	Metal Tapes (Bench Method)
70 ft	0.0124 ft	Metal Tapes (Bench Method)
80 ft	0.0139 ft	Metal Tapes (Bench Method)
90 ft	0.0153 ft	Metal Tapes (Bench Method)

Range	*Best Uncertainty (±)$^{note\ 1}$*	*Remarks*
100 ft	0.0169 ft	Metal Tapes (Bench Method)
110 ft	0.0182 ft	Metal Tapes (Bench Method)
120 ft	0.0198 ft	Metal Tapes (Bench Method)
130 ft	0.0212 ft	Metal Tapes (Bench Method)
140 ft	0.0228 ft	Metal Tapes (Bench Method)
150 ft	0.0242 ft	Metal Tapes (Bench Method)
160 ft	0.0228 ft	Metal Tapes (Bench Method)
170 ft	0.0228 ft	Metal Tapes (Bench Method)
180 ft	0.0212 ft	Metal Tape (Bench Method)
190 ft	0.0288 ft	Metal Tape (Bench Method)
200 ft	0.0301 ft	Metal Tape (Bench Method)
1 - 50 ft	0.0054 ft	Steel Tape (Tape-to-Tape)
60 - 100 ft	0.0108 ft	Steel Tape (Tape-to-Tape)
110 - 150 ft	0.0162 ft	Steel Tape (Tape-to-Tape)
160 - 200 ft	0.0215 ft	Steel Tape (Tape-to-Tape)

MECHANICAL

NVLAP Code: 20/M12
Volume and Density

10000 ml	0.6248 ml	Gravimetric Method
1000 ml	0.0628 ml	Gravimetric Method
100 ml	0.00617 ml	Gravimetric Method
10 ml	0.00063 ml	Gravimetric Method
1 ml	0.00010 ml	Gravimetric Method
100 gal	17.088 ml	Gravimetric Method
50 gal	13.000 ml	Gravimetric Method
25 gal	10.160 ml	Gravimetric Method
5 gal	0.309 in^3	Volumetric Provers (Volumetric Transfer Method)
1500 gal	35.372 in^3	Large Volume Provers (Volumetric Transfer Method)

Range	Best Uncertainty (±)note 1	Remarks
1000 gal	24.243 in^3	Large Volume Provers (Volumetric Transfer Method)
500 gal	13.063 in^3	Large Volume Provers (Volumetric Transfer Method)
100 gal	3.797 in^3	Large Volume Provers (Volumetric Transfer Method)
100 gal	11.97 in^3	LPG Provers (Volumetric Transfer Method)

THERMODYNAMICS

NVLAP Code: 20/T03
Laboratory Thermometers

Range	Best Uncertainty (±)note 1	Remarks
Triple Point of Water	0.00061 °C	Liquid-in-glass, digital thermometers
10 °C	0.00542 °C	Liquid-in-glass, digital thermometers
20 °C	0.00494 °C	Liquid-in-glass, digital thermometers
30 °C	0.00502 °C	Liquid-in-glass, digital thermometers
40 °C	0.00512 °C	Liquid-in-glass, digital thermometers
50 °C	0.00522 °C	Liquid-in-glass, digital thermometers
60 °C	0.00532 °C	Liquid-in-glass, digital thermometers
70 °C	0.00543 °C	Liquid-in-glass, digital thermometers
80 °C	0.00555 °C	Liquid-in-glass, digital thermometers
90 °C	0.00568 °C	Liquid-in-glass, digital thermometers
100 °C	0.00580 °C	Liquid-in-glass, digital thermometers
150 °C	0.00607 °C	Liquid-in-glass, digital thermometers
200 °C	0.00754 °C	Liquid-in-glass, digital thermometers
250 °C	0.00921 °C	Liquid-in-glass, digital thermometers
350 °C	0.01473 °C	Liquid-in-glass, digital thermometers

Range	*Best Uncertainty (±)*[note 1]	*Remarks*
400 °C	0.01859 °C	Liquid-on-glass, digital thermometers
450 °C	0.02252 °C	Liquid-in-glass, digital thermometers
500 °C	0.02649 °C	Liquid-in-glass, digital thermometers

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1. Represents an expanded uncertainty using a coverage factor, k=2

NVLAP LAB CODE 105004-0

U.S. ARMY PRIMARY STANDARDS LABORATORY
Attn: AMSAM-TMD-S
Redstone Arsenal, AL 35898-5000
Contact: Dr. James R. Jones
Phone: 256-876-2666 Fax: 256-876-6014
E-Mail: jjones@redstone.army.mil
URL: http://tmdehome.redstone.army.mil/apsl/

Accreditation Valid Through: December 31, 1999

ELECTROMAGNETICS/DC-LOW FREQUENCY

NVLAP Code: 20/E06
DC Volts

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
0 - 10 volts	0.04 ppm	Josephson Array System

TIME AND FREQUENCY

NVLAP Code: 20/F01
Frequency

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
0.1 MHz	1×10^{-12}	NIST FMS System
1 MHz	1×10^{-12}	NIST FMS System
5 MHz	1×10^{-12}	NIST FMS System
10 MHz	1×10^{-12}	NIST FMS System

IONIZING RADIATION

NVLAP Code: 20/I04
Radioactive Sources

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
0 to 1×10^6 Bq	5%	Large Area Sources, ^{238}Pu, ^{239}Pu

ELECTROMAGNETICS/RF MICROWAVE

NVLAP Code: 20/R12
RF/Microwave Bolometer Units

Frequency	*Calibration Factor*	
0.0001 to 18 GHz	0.7 to 2.0%	Coaxial, Type N Connector
7 to 10 GHz	2.0%	H Band (WR-112) Waveguide
8.2 to 12.4 GHz	1.8%	X Band WR-90) Waveguide
12.4 to 18.0 GHz	2.0%	Ku Band (WR-62) Waveguide

18.0 to 26.5 GHz	2.5%	K Band (WR-42) Waveguide
26.5 to 40.0 GHz	2.5%	Ka Band (WR-28) Waveguide
43.0 to 45.0 GHz	4.0%	Q Band (WR-22) Waveguide
58.0 to 62.0 GHz	3.0%	V Band (WR-15) Waveguide
93.0 to 96.0 GHz	4.0%	W Band (WR-10) Waveguide

THERMODYNAMICS

NVLAP Code: 20/T07
Resistance Thermometry

Range	*Best Uncertainty (±)*[note 1]	*Remarks*
0.01 °C	0.001 °C	Triple Point of Water
-189.3442 to -38.8344 °C	0.002 °C	Triple Point of Argon & Mercury
29.7646 °C	0.002 °C	Melting Point of Gallium
231.928 to 419.527 °C	0.002 °C	Freeze Point of Tin & Zinc

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1. Represents an expanded uncertainty using a coverage factor, k=2

NVLAP LAB CODE 105007-0

STATE OF VIRGINIA METROLOGY LAB
1 North 14th Street, Room 025
Richmond, VA 23219-3691
Contact: Mr. Michael J. Kramer
Phone: 804-786-0479 Fax: 804-371-0351

Accreditation Valid Through: September 30, 1999

MECHANICAL
NVLAP Code: 20/M08
Mass

Range	*Best Uncertainty (±)*note 1	*Remarks*
500 kg	4567 mg	Tolerance Test
300 kg	4567 mg	Tolerance Test
200 kg	2755 mg	Tolerance Test
100 kg	2755 mg	Tolerance Test
50 kg	278.9 mg	Tolerance Test
30 kg	277.9 mg	Tolerance Test
25 kg	277.5 mg	Tolerance Test
20 kg	277.4 mg	Tolerance Test
10 kg	277.1 mg	Tolerance Test
5 kg	277.2 mg	Tolerance Test
3 kg	277.2 mg	Tolerance Test
2 kg	1.56 mg	Tolerance Test
1 kg	0.576 mg	Tolerance Test
500 g	0.267 mg	Tolerance Test
300 g	0.266 mg	Tolerance Test
200 g	0.266 mg	Tolerance Test
100 g	0.033 mg	Tolerance Test
50 g	0.028 mg	Tolerance Test
30 g	0.027 mg	Tolerance Test
20 g	0.026 mg	Tolerance Test
10 g	0.014 mg	Tolerance Test
5 g	0.009 mg	Tolerance Test
3 g	0.008 mg	Tolerance Test
2 g	0.008 mg	Tolerance Test
1 g	0.007 mg	Tolerance Test
500 mg	0.0048 mg	Tolerance Test

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
300 mg	0.0048 mg	Tolerance Test
200 mg	0.0047 mg	Tolerance Test
100 mg	0.0047 mg	Tolerance Test
50 mg	0.0047 mg	Tolerance Test
30 mg	0.0047 mg	Tolerance Test
20 mg	0.0047 mg	Tolerance Test
10 mg	0.0047 mg	Tolerance Test
5 mg	0.0047 mg	Tolerance Test
3 mg	0.0047 mg	Tolerance Test
2 mg	0.0047 mg	Tolerance Test
1 mg	0.0047 mg	Tolerance Test

DIMENSIONAL

NVLAP Code: 20/D13
Survey Rods and Tapes

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
0 to 25 ft	0.0015 inches	Metal Tapes (Bench Method)
25 to 50 ft	0.003 inches	Metal Tapes (Bench Method)
50 to 75 ft	0.0045 inches	Metal Tapes (Bench Method)
75 to 100 ft	0.006 inches	Metal Tapes (Bench Method)
0 to 25 ft	0.003 inches	Steel Tapes (Tape to Tape)
25 to 50 ft	0.006 inches	Steel Tapes (Tape to Tape)
50 to 75 ft	0.009 inches	Steel Tapes (Tape to Tape)
75 to 100 ft	0.012 inches	Steel Tapes (Tape to Tape)

MECHANICAL

NVLAP Code: 20/M12
Volume and Density

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
1.0 gill	0.002 gill	Volume Transfer
0.5 pint	0.001 pint	Volume Transfer
1.0 pint	0.0005 pint	Volume Transfer
1.0 quart	0.0002 quart	Volume Transfer
0.5 gallon	0.0002 gallon	Volume Transfer

Range	*Best Uncertainty (±)*$^{note\ 1}$	*Remarks*
1.0 gallon	0.00016 gallon	Volume Transfer
50 mL	0.13 mL	Volume Transfer
100 mL	0.26 mL	Volume Transfer
200 mL	0.26 mL	Volume Transfer
500 mL	0.26 mL	Volume Transfer
1 Liter	0.0003 Liter	Volume Transfer
2 Liter	0.0003 Liter	Volume Transfer
5 Liter	0.0003 Liter	Volume Transfer
5 gallon	0.0034 gallon	Volume Transfer
100 gallon	0.05 gallon	Volume Transfer
> 100 gallon	0.05 gallon or 12 in.^{3}	Volume Transfer

THERMODYNAMICS

NVLAP Code: 20/T03
Laboratory Thermometers

Range	*Best Uncertainty (±)*$^{note\ 1}$	*Remarks*
0 °C to 85 °C	0.2 °C	Liquid-in-glass

TIME AND FREQUENCY

NVLAP Code: 20/F01
Frequency

Range	*Best Uncertainty (±)*$^{note\ 1}$	*Remarks*
1000 to 6000 Hz	0.047 mph	Tuning forks at frequencies used in law enforcement converted to miles per hour (mph)

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1. Represents an expanded uncertainty using a coverage factor, k=2

NVLAP LAB CODE 105013-0

HENRY TROEMNER, INC.
6825 Greenway Avenue
Philadelphia, PA 19142-1294
Contact: Mr. Wilbert D. Abele
Phone: 215-724-0800 Fax: 215-724-9663
E-Mail: troemner@troemner.com
URL: http://www.troemner.com

Accreditation Valid Through: September 30, 1999

MECHANICAL
NVLAP Code: 20/M08
Mass

Range	*Best Uncertainty (±)*^{note 1,2}	*Remarks*^{note 3}
30 kg	12.41 mg	
20 kg	9.57 mg	
10 kg	1.18 mg	
5 kg	0.59 mg	
3 kg	0.36 mg	
2 kg	0.24 mg	
1 kg	0.136 mg	
500 g	0.073 mg	
300 g	0.049 mg	
200 g	0.031 mg	
100 g	0.0167 mg	
50 g	0.0084 mg	
30 g	0.0109 mg	
20 g	0.0075 mg	
10 g	0.0047 mg	
5 g	0.0025 mg	
3 g	0.0016 mg	
2 g	0.0012 mg	
1 g	0.0011 mg	
500 mg	0.0007 mg	
300 mg	0.0006 mg	
200 mg	0.0005 mg	
100 mg	0.0006 mg	
50 mg	0.0004 mg	
30 mg	0.0003 mg	

Range	*Best Uncertainty (±)[note 1,2]*	*Remarks[note 3]*
20 mg	0.0007 mg	
10 mg	0.0010 mg	
5 mg	0.0007 mg	
3 mg	0.0007 mg	
2 mg	0.0007 mg	
1 mg	0.0004 mg	
1000 kg	10.34 g	Class III Facility
500 kg	5.03 g	Class III Facility
200 kg	3.26 g	Class III Facility
100 kg	1.64 g	Class III Facility
50 kg	0.087 g	Class III Facility
30 kg	0.072 g	Class III Facility
25 kg	0.066 g	Class III Facility
20 kg	0.057 g	Class III Facility
10 kg	0.024 g	Class III Facility
5 kg	18.30 mg	Class III Facility
3 kg	16.77 mg	Class III Facility
2 kg	11.52 mg	Class III Facility
1 kg	10.09 mg	Class III Facility
500 g	10.02 mg	Class III Facility
300 g	10.01 mg	Class III Facility
3000 lb	16.791 g	Class III Facility
2500 lb	13.551 g	Class III Facility
2000 lb	10.312 g	Class III Facility
1000 lb	5.178 g	Class III Facility
500 lb	3.841 g	Class III Facility
100 lb	0.088 g	Class III Facility
50 lb	0.054 g	Class III Facility
30 lb	0.046 g	Class III Facility
25 lb	0.035 g	Class III Facility
20 lb	0.029 g	Class III Facility
10 lb	0.018 g	Class III Facility
5 lb	10.572 mg	Class III Facility
3 lb	10.127 mg	Class III Facility

Range	*Best Uncertainty (±)*$^{note\ 1,2}$	*Remarks*$^{note\ 3}$
2 lb	10.093 mg	Class III Facility
1 lb	10.019 mg	Class III Facility
0.5 lb	10.005 mg	Class III Facility

NVLAP Code: 20/M12
Volume - Pipettes

Test Volume in μl$^{note\ 5}$	*Best Uncertainty (±)in μl*$^{note\ 1,4}$	*Remarks*
0.2	0.0477	
0.5	0.0422	
1.0	0.0469	
2.5	0.0860	
5.0	0.0983	
10	0.32	
50	0.52	
100	0.45	
500	0.90	
1000	2.18	
2500	18.75	

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1. Represents expanded uncertainty using a coverage factor, k=2.
2. Approximate value. Actual value determined by the test statistics
3. Class III Facility located at 700 Carpenters Crossing, Folcroft, PA 19032
4. Uncertainties at specified test volumes may be greater depending on the range of the unit under test.
5. It is recommended that adjustable volume pipettes not be used below 10% of capacity.

NVLAP LAB CODE 105014-0

SOUTHERN CALIFORNIA EDISON COMPANY
7300 Fenwick Lane
Westminster, CA 92683
Contact: Mr. Jack Burdick
Phone: 714-895-0422 Fax: 714-895-0686
E-Mail: burdicjj@sce.com

Accreditation Valid Through: March 31, 1999

DIMENSIONAL
NVLAP Code: 20/D03
Gage Blocks

Range	*Best Uncertainty (±)* note 1 & 2	*Remarks*
thru 1 in	3.0 μin	Direct Comparison
>1.0 thru 6.0 in	3.0 μin + 1 μin/in	Direct Comparison
7.0 in	7.0 μin	Direct Comparison
8.0 in	7.0 μin	Direct Comparison
10.0 in	7.0 μin	Direct Comparison
12.0 in	7.0 μin	Direct Comparison
16.0 in	10.0 μin	Direct Comparison
20.0 in	10.0 μin	Direct Comparison

MECHANICAL

NVLAP Code: 20/M08
Mass

Range	*Best Uncertainty (±)* note 1 & 2
30 kg	42.1 mg
20 kg	21.6 mg
10 kg	4.6 mg
5 kg	2.5 mg
2 kg	1.8 mg
1 kg	0.245 mg
500 g	0.129 mg
200 g	0.058 mg
100 g	0.035 mg
50 g	0.0231 mg
20 g	0.0142 mg
10 g	0.0128 mg
5 g	0.0081 mg

Range	*Best Uncertainty (±)* *note 1 & 2*	*Remarks*
2 g	0.0033 mg	
1 g	0.0029 mg	
500 mg	0.0016 mg	
200 mg	0.0018 mg	
100 mg	0.0007 mg	
50 mg	0.0017 mg	
20 mg	0.0008 mg	
10 mg	0.0006 mg	
5 mg	0.0007 mg	
2 mg	0.0009 mg	
1 mg	0.0005 mg	

ELECTROMAGNETICS - DC/LOW FREQUENCY

NVLAP Code: 20/E06
DC Voltage

Range	*Best Uncertainty (±)* *note 1 & 2*	*Remarks*
10.00 V	0.28 ppm	Reference Cells
1.018 V	0.20 ppm	
1.000 V	0.46 ppm	
100 mV	2.6 ppm	Meters and Multifunction Calibrators
1.0 V	1.1 ppm	
10.0 V	1.0 ppm	
100.0 V	1.1 ppm	
1000.0 V	1.2 ppm	

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1. Represents an expanded uncertainty using a coverage factor, k=2
2. Approximate value. Actual value determined by the test statistics.

NVLAP LAB CODE 105016-0

FLUKE CORPORATION PRIMARY STANDARDS LABORATORY
6920 Seaway Boulevard
P.O. Box 9090
Everett, WA 98206-9090
Contact: Mr. Raymond D. Kletke
Phone: 425-356-5694 Fax: 425-356-5649
E-Mail: rdk@tc.fluke.com

Accreditation Valid Through: June 30, 1999

ELECTROMAGNETICS - DC/LOW FREQUENCY
NVLAP Code: 20/E01
AC/DC Difference for Low Frequency Voltage

Best Uncertainty (±) in ppm[note 1]

Frequency in Hertz

Range	*Level*	*10*	*20*	*40*	*100*	*1k*	*10k*	*20k*	*50k*	*100k*	*300k*	*500k*	*800k*	*1M*
22 mV	2 mV	940	740	350	740	340	730	740	350	860	1200	1900	2100	2200
22 mV	6 mV	280	220	200	200	200	200	200	280	500	720	910	650	740
22 mV	10 mV	100	150	74	150	160	150	150	180	280	240	590	360	420
22 mV	20 mV	77	65	61	84	60	62	61	130	250	340	500	330	390
220 mV	20 mV	180	120	120	110	110	110	110	130	240	350	520	560	620
220 mV	60 mV	120	62	48	42	44	43	45	64	130	260	340	400	410
220 mV	100 mV	30	45	16	30	27	28	29	35	71	140	190	250	250
220 mV	200 mV	33	40	17	17	21	16	16	38	74	130	110	230	200
700 mV	200 mV	37	43	29	27	28	18	30	37	69	120	150	210	190
700 mV	600 mV	19	34	16	7	12	6	7	33	44	75	77	79	81
2.2 V	0.6 V	19	33	25	15	15	15	9	33	44	88	93	94	98
2.2 V	1 V	77	30	13	7	11	11	11	31	37	74	89	91	75
2.2 V	2 V	84	30	19	6	7	6	6	31	38	87	90	76	77
7 V	2 V	76	33	24	15	13	13	14	37	39	90	94	95	96
7 V	3 V	85	36	25	17	15	15	16	40	43	95	100	100	100
7 V	6 V	82	29	20	7	7	7	6	31	37	89	90	75	76
22 V	6 V	78	33	24	7	13	12	14	35	39	76	75	95	100
22 V	10 V	17	29	13	9	8	8	9	29	39	74	91	94	99
22 V	20 V	16	29	20	8	7	7	8	28	38	88	90	75	76
70 V	20 V	76	33	23	16	17	15	19	37	52	93			
70 V	30 V	80	36	24	18	19	17	22	40	56	100			
70 V	60 V	16	30	20	12	12	15	12	35	43	74			

Best Uncertainty (±) in ppm[note 1]

Frequency in Hertz

Range	*Level*	*10*	*20*	*40*	*100*	*1k*	*10k*	*20k*	*50k*	*100k*	*300k*	*500k*	*800k*	*1M*
220 V	60 V	75	35	20	22	20	22	23	41	54	96			
220 V	100 V	75	31	19	16	16	16	16	38	44				
220 V	200 V	22	33	15	14	14	14	15	41	52				
1000 V	200 V	92	44	33	19	16	25	30	38	61				
1000 V	600 V	95	42	27	21	20	23	23	43	63				
1000 V	1000 V	53	22	20	19	21	23	28	55	80				

NVLAP Code: 20/E01
AC/DC Difference for High Frequency Thermal Converters

Best Uncertainty (±) in Percent

Frequency in Hertz

Range	*2 M*	*10 M*	*20 M*	*30 M*	*50 M*	*100 M*
0.5 V		0.1	0.2	0.2	0.5	1.0
1 V		0.1	0.2	0.2	0.5	1.0
2 V		0.08	0.16	0.16	0.4	0.8
3 V	0.08	0.1	0.16	0.2	0.5	1.0
5 V		0.1	0.2	0.2	0.5	1.0
10 V		0.1	0.2	0.2	0.5	1.0
20 V		0.1	0.15	0.2	0.5	1.0
30 V		0.08	0.16	0.16	0.4	0.8
50 V		0.08	0.16	0.16	0.4	0.8

NVLAP Code: 20/E01
AC/DC Difference for Low Frequency Thermal Current Converters and Shunts

Best Uncertainty (±) in ppm[note 1]

Frequency in Hertz

Range	*10*	*20*	*40*	*400*	*1 k*	*5 k*	*10 k*	*20 k*	*50 k*	*100 k*
10 mA				80				80	120	200
20 mA	200	80	50	80	50	80	80	80	120	200
30 mA				80				80	120	200
50 mA				80				80	120	200
0.1 A				80				80	120	200

Best Uncertainty (±) in ppm$^{note\ 1}$

Frequency in Hertz

Range	*10*	*20*	*40*	*400*	*1 k*	*5 k*	*10 k*	*20 k*	*50 k*	*100 k*
0.2 A	250	80	50	80	50	80	80	80	120	200
0.3 A				80				80	120	200
0.5 A				80				80	120	200
1.0 A				80				80	120	200
2.0 A			80	80	80	80	80	80	120	200
3.0 A				80				80	120	200
5.0 A				80				80	120	200
10.0 A			80	110	80	110	110	120	200	
20.0 A				110				110	200	

NVLAP Code: 20/E02
AC Current

For Calibrators or DMMs

Best Uncertainty (±) in ppm$^{note\ 1}$

Frequency

Current	*10 Hz*	*20 Hz*	*40 Hz*	*400 Hz*	*1 kHz*	*5 kHz*	*10 kHz*
19 μA	250	200	200	200	200	250	250
100 μA	160	90	70	70	70	150	200
190 μA	150	85	57	60	55	150	200
1 mA	150	80	50	50	50	80	100
1.9 mA	150	80	50	50	41	70	90
10 mA	260	90	85	85	85	85	100
19 mA	260	85	51	85	51	85	100
100 mA	260	90	85	85	85	85	100
190 mA	260	85	51	85	51	85	100
1.0 A			85	85	85	100	150
1.9 A			85	85	85	100	150
10 A			85	115	85	120	150

NVLAP Code: 20/E02
AC Current
5500A Console

*Best Uncertainty (±) in ppm^note 1^*

Frequency in Hz

Range	*10*	*45*	*65*	*500*	*1 k*	*5 k*	*10k*
33 μA					180		600
190 μA		70			80		470
329 μA	80	60			80	150	330
330 μA					160	180	
1.9 mA					60		100
3.29 mA	80	60			60	80	90
3.3 mA					140	150	
19 mA					60		90
32.9 mA	130	65			65	80	90
33 mA					85	90	
190 mA					60		90
329 mA	130	65			65	80	90
330 mA					85	100	
2.19 A	130	70			70	80	
2.2 A				100	100		
11 A		90	90	100	130		

NVLAP Code: 20/E02
AC Current

At Factory Annex - Multifunction Calibrators Similar to Fluke 5720A

*Best Uncertainty (±) in ppm^note 1^*

Frequency in Hz

Range	*40*	*1 k*	*10 k*
19 μA		210	1050
190 μA	53	53	260
1.9 mA		46	260
19 mA		53	260
190 mA	43	53	260
1.9 A	90	90	1000

NVLAP Code: 20/E02
AC Current

At Factory Annex - Multiproduct Calibrators Similar to Fluke 5500A

Best Uncertainty (±) in ppm$^{\text{note 1}}$

Frequency in Hz

Range	*10*	*45*	*65*	*500*	*1 k*	*5 k*	*10k*
33 μA					1400		2200
190 μA		270			360		1600
329 μA	380	220			270	560	1600
330 μA					270	390	
1.9 mA					170		750
3.29 mA	320	140			140	260	730
3.3 mA					260	390	
19 mA					150		750
32.9 mA	350	140			140	260	740
33 mA					260	390	
190 mA					170		750
329 mA	350	140			140	250	740
330 mA					279	1300	
2.19 A	410	150			210	1200	
2.2 A				300	550		
11 A	110		120	160	430		

NVLAP Code: 20/E05
DC Resistance

Range in ohms	*Best Uncertainty (±) in ppm*$^{\text{note 1}}$	*Remarks*
0.01 to <0.1	10	Guildline Bridge
0.1 to <1	.5	Guildline Bridge
1 to <11	0.3	Guildline Bridge
11 to <110	0.35	Guildline Bridge
110 to <190	0.45	Guildline Bridge
190 to <11 k	0.4	Guildline Bridge
11 k to <19 k	0.45	Guildline Bridge
19 k to <110 k	0.4	Guildline Bridge

Range in ohms	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
110 k to <1.1 M	1.2	Guildline Bridge
1	0.5	Low Ohm System
10	0.6	Low Ohm System
100	0.75	Low Ohm System
1 k	0.6	Low Ohm System
10 k	0.75	Low Ohm System

NVLAP Code: 20/E05
DC Resistance

Range in ohms	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
1	12	5700A Console
1.9	10	5700A Console
10	5	5700A Console
19	4	5700A Console
100	3	5700A Console
190	2	5700A Console
1 k	2	5700A Console
1.9 k	2	5700A Console
10 k	0.5	5700A Console
19 k	1	5700A Console
100 k	2	5700A Console
190 k	2.5	5700A Console
1 M	3	5700A Console
1.9 M	3.5	5700A Console
3 M	4	5700A Console
10 M	4.5	5700A Console
19 M	6	5700A Console
30 M	15	5700A Console
100 M	25	5700A Console
300 M	60	5700A Console

NVLAP Code: 20/E05
DC Resistance

Range in ohms	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
0	100	5500A Console
2.0	55	5500A Console
10.9	25	5500A Console
11.9	25	5500A Console
19	70	5500A Console
30	70	5500A Console
33	40	5500A Console
109	21	5500A Console
119	17	5500A Console
190	13	5500A Console
300	12	5500A Console
330	11	5500A Console
1.09 k	10	5500A Console
1.19 k	10	5500A Console
1.9 k	13	5500A Console
3 k	12	5500A Console
3.3 k	11	5500A Console
10.9 k	10	5500A Console
11.9 k	10	5500A Console
19 k	12	5500A Console
30 k	12	5500A Console
33 k	11	5500A Console
109 k	10	5500A Console
119 k	10	5500A Console
190 k	24	5500A Console
300 k	20	5500A Console
330 k	20	5500A Console
1.09 M	16	5500A Console
1.19 M	15	5500A Console
1.9 M	8	5500A Console
3 M	8	5500A Console
3.3 M	85	5500A Console
10.9 M	62	5500A Console

Range in ohms	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
11.9 M	61	5500A Console
19 M	30	5500A Console
30 M	30	5500A Console
33 M	550	5500A Console
109 M	525	5500A Console
119 M	525	5500A Console
290 M	100	5500A Console

NVLAP Code: 20/E05
Resistance

At Factory Annex - Multifunction Calibrators Similar to Fluke 5720A

Range in ohms	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
1	24.0	5720A Console
1.9	20.0	5720A Console
10	10.0	5720A Console
19	8.4	5720A Console
100	3.2	5720A Console
190	2.6	5720A Console
1 k	3.0	5720A Console
1.9 k	2.5	5720A Console
10 k	2.0	5720A Console
19 k	2.2	5720A Console
100 k	2.2	5720A Console
190 k	2.4	5720A Console
1 M	4.0	5720A Console
1.9 M	4.7	5720A Console
10 M	8.0	5720A Console
19 M	10.5	5720A Console
100 M	35.5	5720A Console

NVLAP Code: 20/E05
DC Resistance
At Factory Annex - Multifunction Calibrators Similar to Fluke 5500A

Range in ohms	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
2	100	5500A Console
10.9	40	5500A Console
11.9	40	5500A Console
19	90	5500A Console
30	90	5500A Console
33	50	5500A Console
109	40	5500A Console
119	20	5500A Console
190	20	5500A Console
300	20	5500A Console
330	15	5500A Console
1.1 k	15	5500A Console
1.2 k	15	5500A Console
1.9 k	15	5500A Console
3 k	15	5500A Console
3.3 k	15	5500A Console
10.9	15	5500A Console
11.9 k	15	5500A Console
19 k	15	5500A Console
30 k	15	5500A Console
33 k	15	5500A Console
109 k	15	5500A Console
119 k	15	5500A Console
190 k	25	5500A Console
300 k	25	5500A Console
330 k	25	5500A Console
1.1 M	25	5500A Console
1.2 M	25	5500A Console
1.9 M	25	5500A Console
3.0 M	25	5500A Console
3.3 M	100	5500A Console
10.9 M	100	5500A Console

Range in ohms	*Best Uncertainty (±) in ppm*$^{note\ 1}$	*Remarks*
11.9 M	100	5500A Console
19 M	100	5500A Console
30 M	100	5500A Console
33 M	800	5500A Console
109 M	800	5500A Console
119 M	800	5500A Console
290 M	800	5500A Console

NVLAP Code: 20/E05
DC Current

Range	*Best Uncertainty (±) in ppm*$^{note\ 1}$	*Remarks*
to 19 μA	10	Calibrators or DMMs
100 μA to 190 μA	4	Calibrators or DMMs
1.0 mA to 1.9 mA	4	Calibrators or DMMs
10 mA to 19 mA	9	Calibrators or DMMs
100 mA to 190 mA	10	Calibrators or DMMs
1.0 A	11	Calibrators or DMMs
1.9 A	10	Calibrators or DMMs
10 A	22	Calibrators or DMMs

NVLAP Code: 20/E05
DC Current

Range in (±) Amperes	*Best Uncertainty (±) in ppm*$^{note\ 1}$	*Remarks*
0	3 (nA)	5500A Console
190 μ	8	5500A Console
1.9 m	7	5500A Console
3.29 m	7	5500A Console
19 m	7	5500A Console
32.9 m	7	5500A Console
190 m	8	5500A Console
329 m	8	5500A Console
2.19 m	14	5500A Console
11	30	5500A Console

NVLAP Code: 20/E05
DC Current

At Factory Annex - Multifunction Calibrators Similar to Fluke 5720A

Range	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
19 μA	100	5720A Console
190 μA	28	5720A Console
-190 μA	16	5720A Console
±19 mA	8	5720A Console
±19 mA	12	5720A Console
100 mA	12	5720A Console
±190 mA	12	5720A Console
1 A	19	5720A Console
±1.9 A	16	5720A Console

NVLAP Code: 20/E05
DC Current

At Factory Annex - Multifunction Calibrators Similar to Fluke 5500A

Range (±) Ampheres	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
190 μ	58	5500A Console
1.9 m	32	5500A Console
3.3 m	29	5500A Console
19 m	21	5500A Console
32.9 m	20	5500A Console
190 m	42	5500A Console
329 m	40	5500A Console
2.29	40	5500A Console
11	65	5500A Console

NVLAP Code: 20/E06
DC Voltage

	Range	*Best Uncertainty (±)*[note 1]	*Remarks*
Reference Standards			
	10.00 V	0.02 ppm[note 2]	Direct Comparison - in lab
	10.00 V	0.06 ppm[note 2]	Direct Comparison - remote location

Well Isolated DC Sources or Voltmeters

200 μV to 10 V	$(0.02 + 0.1E^{0.2})$ μV$^{note\ 2,\ 3}$	Direct against J Array
>10 V to 100 V	0.5 ppm$^{note\ 2}$	J Array & Divider
>100 V to 1000 V	0.7 ppm$^{note\ 2}$	J Array & Divider

Calibrators or Digital Voltmeters

0.1 V	3.0 ppm	Transfer Method
1.0 V	0.8 ppm	Transfer Method
10.0 V	0.3 ppm	Transfer Method
100.0 V	0.5 ppm	Transfer Method
1000.0 V	0.8 ppm	Transfer Method

NVLAP Code: 20/E06
DC Voltage

Range in (±) Volts	*Best Uncertainty (±) in ppm*$^{note\ 1}$	*Remarks*
0	0.5	5500A Console
0.329	7.0	5500A Console
3.29	5.5	5500A Console
32.9	8.0	5500A Console
50	8.0	5500A Console
329	8.0	5500A Console
334	8.5	5500A Console
900	7.0	5500A Console
1020	7.0	5500A Console

NVLAP Code: 20/E06
DC Voltage

At Factory Annex - Multifunction Calibrators Similar to Fluke 5720A

Range	*Best Uncertainty (±) in ppm*$^{note\ 1}$	*Remarks*
100 mV	5.0	5720A Console
-100 mV	6.5	5720A Console
±1.0 V	1.2	5720A Console
±10.0 V	0.7	5720A Console
±100.0 V	1.0	5720A Console
±1000.0 V	1.4	5720A Console

NVLAP Code: 20/E06
DC Voltage

At Factory Annex - Multiproduct Calibrators Similar to Fluke 5500A

Range in (±) Volts	*Best Uncertainty (±) in ppm*$^{\text{note 1}}$	*Remarks*
0.329	8	5500A Console
3.29	7	5500A Console
32.9	10	5500A Console
50	9	5500A Console
329	9	5500A Console
334	10	5500A Console
900	9	5500A Console
1020	9	5500A Console

NVLAP Code: 20/E09
LF AC Voltage

Best Uncertainty in ppm (±)$^{\text{note 1}}$

Frequency in Hertz

Range	*10*	*20*	*40*	*100*	*1k*	*10k*	*20k*	*50k*	*100k*	*300k*	*500k*	*800k*	*1 M*
2 mV	1000	840	520	840	510	830	840	520	940	1300	2000	2200	2300
6 mV	310	260	240	240	240	240	240	320	520	740	920	670	760
10 mV	130	170	110	170	180	170	170	200	300	260	600	370	430
20 mV	89	78	76	95	75	76	76	140	260	350	510	340	400
60 mV	130	65	52	46	48	47	49	67	130	280	340	400	410
100 mV	36	47	22	33	31	32	32	38	73	140	190	250	250
200 mV	35	42	20	20	24	20	19	40	75	130	110	230	200
600 mV	20	35	18	10	14	10	10	33	44	76	78	80	82
1 V	77	31	15	10	13	13	13	31	38	74	89	91	75
2 V	84	31	20	9	9	9	9	32	38	88	90	77	77
3 V	85	37	26	18	16	16	17	40	43	95	100	100	100
6 V	82	30	21	9	9	9	8	32	38	89	90	75	76
10 V	18	29	14	10	9	9	10	29	39	74	91	94	99
20 V	17	29	21	10	9	9	10	28	38	88	90	75	76
30 V	81	37	26	20	21	19	24	41	57	100			
60 V	18	31	22	14	14	16	14	36	44	74			
100 V	76	32	20	18	17	17	18	39	44				

Best Uncertainty in ppm (±)[note 1]

Frequency in Hertz

Range	*10*	*20*	*40*	*100*	*1k*	*10k*	*20k*	*50k*	*100k*	*300k*	*500k*	*800k*	*1 M*
200 V	23	33	16	15	16	15	16	41	52				
600 V	95	43	29	22	22	24	25	44	64				
1000 V	54	23	22	21	23	24	29	58	81				

NVLAP Code: 20/E09
AC Voltage

Multiproduct Calibrators Similar to Fluke 5500A

Best Uncertainty (±) in ppm[note 1]

Frequency in Hertz

Range in Volts	*9.5*	*10*	*45*	*1 k*	*5k*	*8 k*	*10 k*	*18 k*	*20 k*	*50 k*	*90 k*	*100 k*	*450 k*	*500 k*
0.01			250	250	250		250							
0.03	800	250	100	100			100		100	160		270	750	
0.3	800	170	30	30			30		35	50		80		300
3.0	800	160	25	25			25		25	50		70	350	
30	800	160	25	25			25		25	50	100			
300			35	35			35	45						
1000			35	35	35	35								

NVLAP Code: 20/E09
AC Voltage
At Factory Annex - Multifunction Calibrators Similar to Fluke 5720A

Best Uncertainty (±) in ppm[note 1]

Frequency in Hertz

Range	*40*	*50*	*1 k*	*20 k*	*100 k*	*300 k*	*500 k*	*1 Mhz*
1.9 mV			740	840				
19 mV	90		90	90	270	420		1100
190 mV	30		60	80	130	240		740
600 mV	30		20	20	50	130		500
1 V	20		10	10	50	100		400
2 V			20	20				400
3 V	30		20	20	50	180		670
10 V	20		10	10	40	140		400

Best Uncertainty (±) in ppm$^{\text{note 1}}$

Frequency in Hertz

Range	*40*	*50*	*1 k*	*20 k*	*100 k*	*300 k*	*500 k*	*1 Mhz*
1.9 mV			740	840				
20 V			10	10				400
30 V	30		20	20	60	330	1700	
100 V	20		20	20	50			
200 V	25		20		60			
500 V		30	20					
1100 V		25	30					

NVLAP Code: 20/E09
AC Voltage

At Factory Annex - Multiproduct Calibrators Similar to Fluke 5500A

Best Uncertainty (±) in ppm$^{\text{note 1}}$

Frequency in Hertz

Range	*10*	*45*	*1 k*	*5 k*	*10 k*	*20 k*	*50 k*	*100 k*	*500 k*
0.03 V	300	180	180		180	180	250	350	900
0.3 V	180	27	27		27	27	50	75	380
3.0 V	180	27	27		27	27	50	75	380
30 V	160	30	30		30	30	55	100	
300 V		50	40		40	60			
1000 V		50	50	50	50$^{\text{note 4}}$				

NVLAP Code: 20/E10
Capacitance
Three Wire

Best Uncertainty (±)$^{\text{note 1}}$

Frequency in Hertz

Range	*1 k*	*10 k*
1.0 pF to 1.1111 μF	0.01% + (0.002% * C μF) f^2 kHz	0.01% + (0.002% * C μF) f^2 kHz
1.0 pF to 0.001 μF	0.01%	0.01%
0.001 μF to 0.01 μF	0.01%	0.012%
0.01 μF to 0.05 μF	0.01%	0.02%

	Best Uncertainty (±)[note 1] *Frequency in Hertz*	
Range	*1 k*	*10 k*
0.05 μF to 0.1 μF	0.01%	0.03%
0.1 μF to 0.5 μF	0.011%	0.11%
0.5 μF to 1.11 μF	0.012%	0.21%
Two Wire		
10 pF to 1.1111 μF	0.01% + (0.002% * C μF)F^2 kHz + 0.5 pF	0.01% + (0.002% * C μF)f^2 kHz + 0.5 pF
10 pF	5%	5%
100 pF	0.5%	0.5%
1000 pF	0.06%	0.06%
0.01 μF	0.015%	0.017%
0.1 μF to 1 μF	0.015%	0.017%

NVLAP Code: 20/E10
Capacitance

Range	*Best Uncertainty (±) in ppm[note 1]*	*Remarks*
350 pF @ 1000 Hz	2500	5500A Console
480 pF @ 1000 Hz	2100	5500A Console
600 pF @ 1000 Hz	1300	5500A Console
1 nF @ 1000 Hz	1000	5500A Console
2 nF @ 1000 Hz	800	5500A Console
7 nf @ 1000 Hz	710	5500A Console
10.9 nF @ 1000 Hz	700	5500A Console
20 nF @ 1000 Hz	700	5500A Console
70 nF @ 1000 Hz	690	5500A Console
200 nF @ 1000 Hz	690	5500A Console
300 nF @ 1000 Hz	680	5500A Console
700 nF @ 100 Hz	680	5500A Console
2 μF @ 100 Hz	690	5500A Console
3 μF @ 100 Hz	690	5500A Console
7 μF @ 100 Hz	690	5500A Console
10.9 μF @ 100 Hz	690	5500A Console
20 μF @ 100 Hz	700	5500A Console

Range	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
30 μF @ 100 Hz	710	5500A Console
70 μF @ 100 Hz	740	5500A Console
200 μF @ 100 Hz	1400	5500A Console
300 μF @ 100 Hz	1500	5500A Console
330 μF @ 50 Hz	1600	5500A Console
1.1 mF @ 50 Hz	2400	5500A Console

NVLAP Code: 20/E10
Capacitance

At Factory Annex - Multiproduct Calibrators Similar to Fluke 5500A

Range	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
350 pF @ 1000 Hz	3200	5500A Console
480 pF @ 1000 Hz	3000	5500A Console
600 pF @ 1000 Hz	1600	5500A Console
1 nF @ 1000 Hz	1600	5500A Console
2 nF @ 1000 Hz	1200	5500A Console
7 nF @ 1000 Hz	1200	5500A Console
10.9 nF @ 1000 Hz	1000	5500A Console
20 nF @ 1000 Hz	1000	5500A Console
70 nF @ 1000 Hz	820	5500A Console
200 nF @ 1000 Hz	820	5500A Console
300 nF @ 1000 Hz	820	5500A Console
700 nF @ 100 Hz	820	5500A Console
2 μF @ 100 Hz	850	5500A Console
3 μF @ 100 Hz	850	5500A Console
7 μF @ 100 Hz	850	5500A Console
10.9 μF @ 100 Hz	850	5500A Console
20 μF @ 100 Hz	850	5500A Console
30 μF @ 100 Hz	860	5500A Console
70 μF @ 100 Hz	900	5500A Console
200 μF @ 100 Hz	1500	5500A Console
300 μF @ 100 Hz	1550	5500A Console
330 μF @ 50 Hz	1700	5500A Console
1.1 mF @ 50 Hz	2400	5500A Console

NVLAP Code: 20/E15
Phase

5500A Console

Range Phase (degrees)	*Best Uncertainty (±) in degrees*[note 1] *Frequency in Hertz* 60	65	400	1 k	5 k	10 k	*Mode*
0		0.02	0.06				ACV/ACC
0	0.02		0.06	0.06	0.06	0.06	ACV/ACV
60	0.02		0.06	0.06	0.06	0.06	ACV/ACV
90	0.02		0.06	0.06	0.06	0.06	ACV/ACV

NVLAP Code: 20/E15
Phase

At Factory Annex - Multiproduct Calibrators Similar to Fluke 5500A

Range in Degrees	*Frequency in Hz*	*Best Uncertainty (±) in Degrees*[note 1]
0	60 to 65	0.025
0	400 to 10 k	0.075
60	60	0.025
60	400 to 10 k	0.075
90	60	0.025
90	400 to 10 k	0.075

TIME AND FREQUENCY

NVLAP Code: 20/F01
Frequency

Range in Hz	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
119 to 120	1	5500A Console
1000	1	5500A Console
100000	1	5500A Console

NVLAP Code: 20/F01
Frequency

At Factory Annex - Multiproduct Calibrators Similar to Fluke 5500A

Range in Hz	*Best Uncertainty (±) in ppm*[note 1]	*Remarks*
119	5	5500A Console
120	5	5500A Console
1000	5	5500A Console
100000	5	5500A Console

THERMODYNAMICS

NVLAP Code: 20/T03
Temperature

Range in °C	*Best Uncertainty (±) in mK*[note 1]	*Remarks*
-40 to -197	11	
-1 to -40	8	
-1 to 1	5	
0.01	4.5	
1 to 150	10	
150 to 350	15	

NVLAP Code: 20/T06
Thermocouple Temperature

Range in °C	*Best Uncertainty (±) in °C*[note 1]	*Remarks*
Simulated TC Temperature with UUT Sourcing, 5500 Console Measuring		
0	0.03	10 μV/C Linear Mode, Voltage Simulates Temperature
100	0.03	10 μV/C Linear Mode, Voltage Simulates Temperature
-100	0.03	10 μV/C Linear Mode, Voltage Simulates Temperature
1000	0.04	10 μV/C Linear Mode, Voltage Simulates Temperature
-1000	0.04	10 μV/C Linear Mode, Voltage Simulates Temperature
10000	0.08	10 μV/C Linear Mode, Voltage Simulates Temperature
-10000	0.08	10 μV/C Linear Mode, Voltage Simulates Temperature

Simulated TC Temperature with UUT Measurement, 5500A Console Sourcing

0	0.05	10 μV/C Linear Mode, Voltage Simulates Temperature
10000	0.12	10 μV/C Linear Mode, Voltage Simulates Temperature
-10000	0.12	10 μV/C Linear Mode, Voltage Simulates Temperature
30000	0.24	10 μV/C Linear Mode, Voltage Simulates Temperature
-30000	0.24	10 μV/C Linear Mode, Voltage Simulates Temperature

Thermocouple Temperature

23	0.18	Type K

NVLAP Code: 20/T08
Simulated Temperature

At Factory Annex - Multiproduct Calibrators Similar to Fluke 5500A

Range in °C	*Function*	*Best Uncertainty (±)in °C*[note 1]
0 to ±1000	Source	0.1
±10000	Source	0.16
0	Measure	0.1
23	Measure	0.05
±10000	Measure	0.2
±30000	Measure	0.4

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1. Represents an expanded uncertainty at a level of confidence of 99%; coverage factor *k* is determined by the test statistics.
2. Approximate value. Actual value determined by the test statistics.
3. E = Actual Voltage
4. 1000 V Limit is 8 kHz.

NVLAP LAB CODE 105017-0

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DIMENSIONAL

NVLAP Code: 20/D03
Gage Blocks

	Range	*Best Uncertainty* (±)[note 1]	*Remarks*
He-Ne Laser			
	633 nm	0.0014 ppm	Comparison
NPL-Tesa Interferometer			
	0.01 to 12 in	$\sqrt{(25.0\ nm)^2+(0.32\ \frac{nm}{mm}\ L(nm))^2}$ nm	Interferometer
Gage Block Sets			
	5.0 to 12 in	1.8 to 4.0 μin	Interferometer
	0.01 to 12 in	0.98 to 4.0 μin	Interferometer
	0.3 to 100 mm	25 to 41 nm	Interferometer
	0.01 to 12 in	1.2 to 5.0 μin	Comparator
	16 to 20 in	6.6 to 8.2 μin	Comparator
	0.3 to 100 mm	25.6 to 51.2 nm	Comparator

ELECTROMAGNETIC - DC/LOW FREQUENCY

NVLAP Code: 20/E01
Thermal Voltage Converters

Single-Range Coaxial Thermal Voltage Converters (Best uncertainty (±) in μV/V or 10^{-6})[note 1]

Frequency in Hertz

Range	*10*	*20*	*40*	*100*	*1 k*	*20 k*	*50 k*	*100 k*	*200 k*	*300 k*	*500 k*	*1 M*
1 V	20	16	14	10	12	12	32	48	-	84	84	84
3 V	20	16	20	10	10	10	32	48	-	84	84	84
6 V	20	16	16	10	10	10	40	48	-	84	84	84
10 V	20	16	16	10	10	10	32	48	-	84	84	84

Single-Range Coaxial Thermal Voltage Converters (Best uncertainty (±) in μV/V or 10^{-6})[note 1]

Frequency in Hertz

Range	*10*	*20*	*40*	*100*	*1 k*	*20 k*	*50 k*	*100 k*	*200 k*	*300 k*	*500 k*	*1 M*
30 V	24	18	16	14	10	14	32	48	84	-	-	-
60 V	24	18	16	14	10	14	32	48	84	-	-	-
100 V	24	18	16	16	16	16	38	60	86[note 4]	-	-	-
300 V	150[note 4]	40[note 4]	40[note 4]	16	24	16	38	60	-	-	-	-
500 V	150[note 4]	40[note 4]	40[note 4]	20	20	20	38	60[note 4]	-	-	-	-
1000 V	150[note 4]	50[note 4]	50[note 4]	46	36	32	40[note 4]	60[note 4]	-	-	-	-

Multi-Range Coaxial Thermal Voltage Converters (Best uncertainty (±) in μV/V or 10^{-6})[note 1]

Frequency in Hertz

Range	*50*	*1 k*	*10 k*	*20 k*	*30 k*	*50 k*	*100 k*	*200 k*	*500 k*	*1 M*
0.5 V	36	-	-	56	-	52	66	-	126	154
1 V	38	-	-	44	-	56	72	-	120	142
2 V	38	-	-	44	-	56	72	-	120	142
3 V	38	-	-	44	-	70	82	-	120	142
5 V	38	-	-	44	-	70	82	-	120	142
10 V	56	-	-	60	-	70	82	-	120	142
20 V	56	-	-	60	-	70	82	122	-	-
30 V	56	-	-	62	-	70	82	134	-	-
50 V	78	-	-	62	-	90	108	198	-	-
100 V	78	-	-	62	-	92	110	-	-	-
200 V	78	-	-	84	-	92	126	-	-	-
300 V	82	-	92	-	94	92	150	-	-	-
500 V	82	-	92	-	96	104	-	-	-	-
1000 V	88	90	92	102	-	-	-	-	-	-

NVLAP Code: 20/E05
DC Resistance

Primary Reference Transfer Level

Range	Best Uncertainty (±) in ppm[note 1]	Remarks
1.0 ohm	0.21	Direct Comparison
10.0 k ohm	0.25	Substitution Method

Primary Reference Level

Range	Best Uncertainty (±) in ppm[note 1]	Remarks
0.001 ohm	0.78	Direct Comparison
0.01 ohm	0.78	Direct Comparison
0.1 ohm	0.78	Direct Comparison
1.0 ohm	0.26	Substitution Method
10.0 ohm	0.28	Direct Comparison
100.0 ohm	0.34	Direct Comparison
1.0 k ohm	0.35	Direct Comparison
10.0 k ohm	0.33	Substitution Method
100.0 k ohm	2.1	Direct Comparison
1.0 M ohm	3.2	Direct Comparison

Working Level

Range	Best Uncertainty (±) in ppm[note 1]	Remarks
0.001	0.78	Direct Comparison
0.01	0.78	Direct Comparison
0.1	0.78	Direct Comparison
1.0	0.29	Substitution Method
10.0	0.32	Substitution Method
100.0	0.42	Substitution Method
1.0 k	0.56	Substitution Method
10.0 k	0.37	Substitution Method
100.0 k	2.2	Direct Comparison
1.0 M	3.6	Substitution Method

ELECTROMAGNETIC - DC/LOW FREQUENCY

NVLAP Code: 20/E06
DC Voltage

	Range	*Best Uncertainty (±) in ppm*$^{note\ 1}$	*Remarks*
Reference Standards	10.0 volts	0.025	AJJ
	1.0 volt	0.13	AJJ
	1.018 volts	0.10	AJJ
Zeners			
	10.0 volts	0.218	Direct Comparison
	1.0 volt	0.277	Direct Comparison
	1.018 volts	0.276	Direct Comparison
Standard Reference (transvolt)			
	1.018 volts	1.8$^{note\ 2}$	Direct Comparison

NVLAP Code: 20/E10
LF Capacitance

Range	*Best Uncertainty (±)*$^{note\ 1}$	*Remarks*
Capacitance (Automatic Bridge, All Connectors)		
1.0-1000 pF @ 1 kHz	0.00048%	Direct/Substitution Measurement
Capacitance (GR874 Connector, 3 Terminal)		
0.1pF @ 1 kHz	0.0085%	Direct Measurement
1.0pF @ 1 kHz	0.0079%	Direct Measurement
10.0 pF @ 1 kHz	0.0039%	Substitution Method
100.0 pF @ 1 kHz	0.0039%	Substitution Method
1000.0 pF @ 1kHz	0.00056%	Direct Measurement
10000.0 pF @ 1 kHz	0.0089%	Direct Measurement
Capacitance (BNC Connector, 3 Terminal)		
1.0 pF @ 1 kHz	0.00063%	Direct Measurement
10.0 pF @ 1 kHz	0.00034%	Substitution Method
100.0 pF @ 1 kHz	0.00026%	Substitution Method
100.0 pF @ 1 kHz	0.0098%	Direct Measurement
300.0 pF @ 1 kHz	0.0098%	Direct Measurement
500.0 pF @ 1 kHz	0.0098%	Direct Measurement
1000.0 pF @ 1 kHz	0.0098%	Direct Measurement

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
Capacitance (GR900 Connector, 2 Terminal)		
1.0 pF @ 1 kHz	0.39%	Direct Measurement
2.0 pF @ 1 kHz	0.20%	Direct Measurement
5.0 pF @ 1 kHz	0.079%	Direct Measurement
10.0 pF @ 1 kHz	0.040%	Direct Measurement
100.0 pF @ 1 kHz	0.013%	Substitution Method
1000.0 pF @ 1 kHz	0.0061%	Direct Measurement
10000.0 pF @ 1 kHz	0.0061%	Direct Measurement
Capacitance (HP-BNC Connector, 4 Terminal)		
1.0 pF @ 1 kHz	0.0079%	Direct Measurement
10.0 pF @ 1 kHz	0.0059%	Direct Measurement
100.0 pF @ 1 kHz	0.0059%	Direct Measurement
1000.0 pF @ 1 kHz	0.0059%	Direct Measurement
Capacitance (Banana and Binding Post, 2 or 3 Terminal)		
100.0 pF @ 1 kHz	0.0049%	Direct Measurement
1.0 nF @ 1 kHz	0.009%	Direct Measurement
2.0 nF @ 1 kHz	0.0089%	Direct Measurement
5.0 nF @ 1 kHz	0.0089%	Direct Measurement
10.0 nF @ 1 kHz	0.0089%	Direct Measurement
20.0 nF @ 1 kHz	0.0089%	Direct Measurement
50.0 nF @ 1 kHz	0.0091%	Direct Measurement
0.1 uF @ 1 kHz	0.0091%	Direct Measurement
0.2 uF @ 1 kHz	0.011%	Direct Measurement
0.5 uF @ 1 kHz	0.018%	Direct Measurement
1.0 uF @ 1 kHz	0.022%	Direct Measurement

NVLAP Code: 20/E13
Magnetics
Permanent Magnets, Transverse

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Method*
0.05 Tesla	0.10%	Direct Transfer
0.1 Tesla	0.58%	Direct Transfer
0.2 Tesla	0.14%	Direct Transfer
0.3 Tesla	0.24%	Direct Transfer
0.5 Tesla	0.46%	Direct Transfer
1.0 Tesla	0.08%	Direct Transfer

TIME AND FREQUENCY

NVLAP Code: 20/F01
Frequency Dissemination

	Range	Best Uncertainty (±)[note 1]	Remarks
Frequency Accuracy: Cesium Beam			
	1.0 MHz	2.16×10^{-13}	Primary Reference/Working Standard
	5.0 MHz	2.16×10^{-13}	Primary Reference/Working Standard
	10.0 MHz	2.16×10^{-13}	Primary Reference/Working Standard

NVLAP Code: 20/F03
Oscillator Characterization

	Range	Best Uncertainty (±)[note 1]	Remarks[note 3]
Phase Noise (5 MHz Carrier)			
Offset Frequency			System Noise Floor
	1 Hz	2.48 dB	-119.19 dBc/Hz
	2 Hz	2.48 dB	-130.81 dBc/Hz
	5 Hz	2.48 dB	-139.83 dBc/Hz
	10 Hz	2.48 dB	-144.79 dBc/Hz
	20 Hz	2.48 dB	-148.30 dBc/Hz
	50 Hz	2.48 dB	-153.00 dBc/Hz
	100 Hz	2.48 dB	-157.48 dBc/Hz
	200 Hz	2.48 dB	-160.82 dBc/Hz
	500 Hz	2.48 dB	-164.74 dBc/Hz
	1000 Hz	2.48 dB	-168.36 dBc/Hz
	2000 Hz	2.48 dB	-169.98 dBc/Hz
	5000 Hz	2.48 dB	-172.40 dBc/Hz
	10000 Hz	2.48 dB	-173.12 dBc/Hz
	20000 Hz	2.48 dB	-173.90 dBc/Hz
	50000 Hz	2.48 dB	-173.88 dBc/Hz
	100000 Hz	2.48 dB	-174.18 dBc/Hz
Phase Noise (10 MHz Carrier)			
	1 Hz	2.48 dB	-113.67 dBc/Hz
	2 Hz	2.48 dB	-125.75 dBc/Hz
	5 Hz	2.48 dB	-136.63 dBc/Hz
	10 Hz	2.48 dB	-143.17 dBc/Hz
	20 Hz	2.48 dB	-148.10 dBc/Hz
	50 Hz	2.48 dB	-153.08 dBc/Hz

Range	Best Uncertainty (±)[note 1]	Remarks[note 3]
100 Hz	2.48 dB	-156.91 dBc/Hz
200 Hz	2.48 dB	-159.86 dBc.Hz
500 Hz	2.48 dB	-163.57 dBc/Hz
1000 Hz	2.48 dB	-166.96 dBc/Hz
2000 Hz	2.48 dB	-168.45 dBc/Hz
5000 Hz	2.48 dB	-168.94 dBc/Hz
10000 Hz	2.48 dB	-169.67 dBc/Hz
20000 Hz	2.48 dB	-168.54 dBc/Hz
50000 Hz	2.48 dB	-169.28 dBc/Hz
100000 Hz	2.48 dB	-171.02 dBc/Hz

Amplitude Noise (5 MHz Carrier)

1 Hz thru 1 MHz	2.48 dB	

Amplitude Noise (10 MHz Carrier)

1 Hz thru 1 MHz	2.48 dB	

Amplitude Noise (10.6 GHz Carrier)

10 Hz thru 1 MHz	2.48 dB	

MECHANICAL

NVLAP Code: 20/M11
Acceleration

Range	Best Uncertainty (±)[note 1]	Remarks
10 Hz @ 2 g	3.6%	Double Displacement Back to Back Cal
15 Hz @ 5 g	2.6%	Double Displacement Back to Back Cal
30-50Hz @10 g	2.6%	Double Displacement Back to Back Cal
100 Hz @ 5 g	1.6%	Double Displacement Back to Back Cal
100-2000 Hz @ 10g	1.6%	Double Displacement Back to Back Cal
2000 Hz @ 5 g	1.4%	Double Displacement Back to Back Cal
2.5 - 10 kHz @ 10g	4.2%	Double Displacement Back to Back Cal

THERMODYNAMICS

NVLAP Code: 20/T07
Resistance Thermometry
SPRT, Fixed Point, 83.8058 to 933.473 K

ITS-90 Sub Range	*Best Uncertainty (±)*[note 1, 5]	*Required Fixed Points*
83.8058 to 273.16 K	0.00052 K	TP Ar, Hg and H_2O
234.3156 to 302.9146 K	0.00030 K	TP Hg, H_2O and MP Ga
273.15 to 302.9146 K	0.00062 K	MP Ga and TP H_2O
273.15 to 429.7485 K	0.00044 K	FP In and TP H_2O
273.15 to 505.078 K	0.0010 K	FP Sn, In and TP H_2O
273.15 to 692.677 K	0.0010 K	FP Zn, Sn and TP H_2O
273.15 to 933.473 K	0.0012 K	FP Al, Zn, Sn and TP H_2O

RTD Devices (Typically PRT, thermistor, etc.)

Range	*Best Uncertainty (±)*[note 1]	*Method*
77 to 553 K	0.0026 k	Comparison
553 to 693 K	0.017 K	Comparison

---

1. Represents an expanded uncertainty using a coverage factor, k=2
2. Approximate value. Actual value determined by the test statistics.
3. External customer oscillator AM or PM noise must be >20 dB above system noise floor. Oscillators with lower noise levels are individually analyzed with correspondingly higher uncertainties.
4. Manual measurements to be performed.
5. Actual SPRT uncertainty is a smooth curve propagated from fixed point uncertainties and may be lower than shown here, as temperatures approach the triple point of water. (reference NISTIR 5319)

NVLAP LAB CODE 105018-0

CDRH X-RAY CALIBRATION LABORATORY
Health X-Ray Calibration Laboratory
12720 Twinbrook Parkway HFZ-143
Rockville, MD 20857
Contact: Mr. Frank Cerra
Phone: 301-443-2536 x23 Fax: 301-443-9101
E-Mail: fxc@cdrh.fda.gov
URL: http://www.fda.gov/cdrh

Accreditation Valid Through: December 31, 1999

This facility has demonstrated compliance with the NVLAP Criteria for Calibration Laboratories under the field of Ionizing Radiation for the following:

Procedures/Instruments	*Radiation Types*
Calibration of Survey Instruments	X-ray Beam Codes M30, M50, L80, L100, and M100 over the Exposure Rate Range 2 mR/s to 100 mR/s, and the H50 Beam Code over the range 0.5 mR/h to 4 mR/s, with total uncertainty in the reference field value of ± 5 percent.
Calibration of Instruments for Diagnostic Level	X-ray Beam Codes M20, M30, M50, L80, L100, and M100 over the Exposure Rate Range 2 mR/s to 100 mR/s, with total uncertainty in the reference field value of ± 3 percent.
Calibration of Reference-Class Instruments	X-ray Beam Codes M20, M30, M50, L80, L100, and M100 over the Exposure Rate Range 2 mR/s to 100 mR/s, with total uncertainty in the reference field value of ± 3 percent.

NVLAP LAB CODE 105020-0

PACIFIC NORTHWEST NATIONAL LABORATORY
Battelle Boulevard
P.O. Box 999
Richland, WA 99352
Contact: Mr. R. Kim Piper
Phone: 509-376-6187 Fax: 509-376-1992
E-Mail: kim.piper@pnl.gov
URL: http://www.pnl.gov/health/health_prot/cra_page.html

Accreditation Valid Through: December 31, 1999

This facility has demonstrated compliance with the NVLAP Criteria for Calibration Laboratories under the field of Ionizing Radiation for the following:

Calibration Category	*Radiation Type or Beam Code*	*Nominal Intensity Range*[note 3]	*Uncertainty of Reference Field (±)*[note 1,2]
CALIBRATION OF SURVEY INSTRUMENTS			
Gamma	^{241}Am	0.125 R/h	5.2%
	^{137}Cs	0.1 to 250 R/h	1.5%
	^{60}Co	4 to 60,000 R/h	1.5%
X-ray	M30	3 to 500 R/h	1.5%
	M50	4 to 600 R/h	1.5%
	M60	3 to 450 R/h	1.5%
	M100	3 to 500 R/h	1.5%
	M150	4 to 550 R/h	1.5%
	M200	4 to 650 R/h	1.5%
	S60	1 to 175 R/h	1.5%
	S75	5 to 700 R/h	1.5%
	H40	0.02 to 4 R/h	1.5%
	H50	0.05 to 10 R/h	1.5%
	H100	0.02 to 3 R/h	1.5%
	H150	1 to 15 R/h	1.5%
	H200	0.9 to 9 R/h	1.5%
	H250	0.9 to 9 R/h	1.5%
	H300	0.6 to 3 R/h	1.5%
Beta	^{204}Tl	0.9 rad/h	4.4%
	^{90}Sr/^{90}Y	0.4 to 19 rad/h	4.0%

Neutron	^{252}Cf Bare	0.014 to 4.8 rem/h	7.6%
	^{252}Cf Moderated	0.004 to 1.1 rem/h	21.4%

Calibration Category	*Radiation Type or Beam Code*	*Nominal Range*[note 4]	*Uncertainty of Delivered Quantity (±)*[note 1,2]
IRRADIATION OF PERSONNEL DOSIMETERS			
Gamma	^{241}Am	≥ 0.002 R	5.4%
	^{137}Cs	≥ 0.020 R	3.6%
	^{60}Co	≥ 0.025 R	3.6%
X-ray	M30	≥ 0.025 R	3.6%
	M50	≥ 0.035 R	3.6%
	M60	≥ 0.025 R	3.6%
	M100	≥ 0.025 R	3.6%
	M150	≥ 0.035 R	3.6%
	M200	≥ 0.035 R	3.6%
	S60	≥ 0.010 R	3.6%
	S75	≥ 0.040 R	3.6%
	H40	≥ 0.0002 R	3.6%
	H50	≥ 0.0005 R	3.6%
	H100	≥ 0.0002 R	3.6%
	H150	≥ 0.008 R	3.6%
	H200	≥ 0.008 R	3.6%
	H250	≥ 0.008 R	3.6%
	H300	≥ 0.005 R	3.6%
Neutron	^{204}Tl	≥ 0.015 rad	11.8%
	^{90}Sr/^{90}Y	≥ 0.007 rad	5.4%
Beta	^{252}Cf Bare	≥ 0.001 rem	8.0%
	^{252}Cf Moderated	≥ 0.002 rem	22.4%

CALIBRATION OF REFERENCE-CLASS INSTRUMENTS

Calibration Category	*Radiation Type or Beam Code*	*Nominal Intensity Range*[note 3]	*Uncertainty of Reference Field (±)*[note 1,2]
Gamma	^{137}Cs	0.1 to 250 R/h	1.5%
	^{60}Co	4 to 60,000 R/h	1.5%
X-ray	M30	3 to 500 R/h	1.5%
	M50	4 to 600 R/h	1.5%
	M60	3 to 450 R/h	1.5%
	M100	3 to 500 R/h	1.5%
	M150	4 to 550 R/h	1.5%
	M200	4 to 650 R/h	1.5%
	S60	1 to 175 R/h	1.5%
	S75	5 to 700 R/h	1.5%
	H40	0.02 to 4 R/h	1.5%
	H50	0.05 to 10 R/h	1.5%
	H100	0.02 to 3 R/h	1.5%
	H150	1 to 15 R/h	1.5%
	H200	0.9 to 9 R/h	1.5%
	H250	0.9 to 9 R/h	1.5%
	H300	0.6 to 3 R/h	1.5%

---

1. Values listed at the 95% confidence level.
2. Uncertainties are valid for nominal intensity range shown at right.
3. For calibration outside of the nominal intensity range shown, uncertainties would be determined commensurate with the parameters of the reference field calibration.

NVLAP LAB CODE 105023-0

INSTRON FORCE CALIBRATION LABORATORY

100 Royall Street
Canton, MA 02021
Contact: Dr. Anatoly Perlov
Phone: 781-575-5479 Fax: 781-575-5767
E-Mail: Anatoly_Perlov@instron.com
URL: http://www.instron.com

Accreditation Valid Through: September 30, 1999

NVLAP Code/ Parameters	*Range*	*Best Uncertainty (±)notes 1,2,3*	*Remarks*
MECHANICAL 20/M06			
Force			
	Applied Force in Pounds		
	0.1 to 130000	0.005%	Primary Standard
	130000 to 240000	0.005%	Secondary Standard

---

1. Represents an expanded uncertainty using a coverage factor, k=2
2. Uncertainty of the voltage ratio is <0.1 microvolt per volt
3. Uncertainty of the measured value is determined by the statistics of the test and the artifact tested but are typically better than ±0.05% for class AA instruments, ±0.25% for class A instruments and ±0.1% for class A1 instruments.

NVLAP LAB CODE 200029-0

GE INDUSTRIAL SYSTEMS, RENEWAL SERVICES - TEMS
92 Otis Street
Rome, NY 13441
Contact: Mr. Alan L. Brust
Phone: 315-334-7605 Fax: 315-334-7660
E-Mail: alan.brust@indsys.ge.com

Accreditation Valid Through: December 31, 1999

ELECTROMAGNETICS/DC-LOW FREQUENCY

NVLAP Code: 20/E05
DC Resistance

Value in ohms	*Best Uncertainty in ppm (±)*[note 1]	*Remarks*
0.1	1.0	
1	1.0	
10	1.0	
100	1.0	
1 k	1.5	
10 k	1.5	
100 k	4.0	
1 M	4.6	
10 M	6.2	
100 M	13.4	

NVLAP Code: 20/E06
DC Voltage

Range in Volts	*Best Uncertainty in ppm (±)*[note 1]	*Remarks*
0.1	3	Zener Reference Diodes, Standard Cells, High Level MMs and Calibrators
1.0	1.5	Zener Reference Diodes, Standard Cells, High Level MMs and Calibrators
10.0	1.2	Zener Reference Diodes, Standard Cells, High Level MMs and Calibrators
100.0	1.5	Zener Reference Diodes, Standard Cells, High Level MMs and Calibrators
1000.0	2.0	Zener Reference Diodes, Standard Cells, High Level MMs and Calibrators

THERMODYNAMICS

NVLAP Code: 20/T05
Pressure

Range	*Uncertainty (±) of reading*[note 1]	*Remarks*
0.2 to 1000 psia	36 ppm	Inert Gas
0.2 to 1000 psi	36 ppm	Inert Gas
15 to 10000 psi	0.02%	Inert Gas
15 to 15000 psi	0.02%	Fluid

---

1. Represents an expanded uncertainty using a coverage factor, k=2

NVLAP LAB CODE 200038-0

WEBBER GAGE DIVISION / L.S. STARRETT CO.
24500 Detroit Road
Cleveland, OH 44145
Contact: Mr. David Friedel
Phone: 440-835-0001 Fax: 440-892-9555

Accreditation Valid Through: December 31, 1999

DIMENSIONAL

NVLAP Code: 20/D03
Gage Blocks

Range	*Best Uncertainty* $(\pm)^{\text{note 1,2,3}}$	*Remarks*
Standard Size Gage Blocks		
thru 1.0 in	1.3 μin	Master Grade Calibration
thru 25 mm	0.035 μm	Master Grade Calibration
>1.0 thru 4.0 in	(0.8 + 0.5L) μin	Master Grade Calibration
> 25 thru 100mm	(0.02 + 0.5L) μm	Master Grade Calibration
> 4.0 thru 20.0 in	(3.5 + 0.25L) μin	Master Grade Calibration
>100 thru 500.0 mm	(0.09 + 0.25L) μm	Master Grade Calibration
thru 4.0 in	(1.4 + 0.6L) $\mu\text{in}^{\text{note 4}}$	Commercial Grade Calibration
thru 100 mm	(0.035 + 0.6L) $\mu\text{m}^{\text{note 5}}$	Commercial Grade Calibration
>4.0 thru 20.0 in	(6.0 + 0.3L) μin	Commercial Grade Calibration
>100 thru 500 mm	(0.15 + 0.3L) μm	Commercial Grade Calibration
Non Standard Size Gage Blocks		
to 1.0 in	2.2 μin	Master Grade Calibration
to 25 mm	0.055 μm	Master Grade Calibration
>1.0 thru 4.6 in	(1.6 + 0.6L) μin	Master Grade Calibration
> 25 thru 117mm	(0.04 + 0.6L) μm	Master Grade Calibration
>4.6 thru 20.0 in	(6.0 + 0.35L) μin	Master Grade Calibration
>117 thru 500 mm	(0.15 + 0.35L) μm	Master Grade Calibration

---

1. Represents an expanded uncertainty using a coverage factor, k=2.
2. Approximate value. Actual value determined by the test statistics.
3. L is in inches or meters as appropriate.
4. Uncertainty not less than 2.0 μin.
5. Uncertainty not less than 0.05 μm.

NVLAP LAB CODE 200106-0

DENVER INSTRUMENT CO. WEIGHT LAB
6542 Fig Street
Arvada, CO 80004-1042
Contact: Mr. Darryl Sampson
Phone: 303-431-7255 Fax: 303-423-4831

Accreditation Valid Through: December 31, 1999

MECHANICAL
NVLAP Code: 20/M08
Mass

Range	*Best Uncertainty (±)*[note 1]	*Remarks*
5 kg	3.8 mg	
4 kg	2.4 mg	
3 kg	2.4 mg	
2 kg	0.37 mg	
1 kg	0.33 mg	
500 g	0.080 mg	
400 g	0.075 mg	
300 g	0.071 mg	
200 g	0.056 mg	
160 g	0.055 mg	
150 g	0.055 mg	
100 g	0.029 mg	
50 g	0.0215 mg	
40 g	0.0216 mg	
30 g	0.0216 mg	
20 g	0.0208 mg	
10 g	0.0127 mg	
5 g	0.0111 mg	
3 g	0.0112 mg	
2 g	0.0108 mg	
1 g	0.0108 mg	
500 mg	0.0030 mg	
300 mg	0.0031 mg	
200 mg	0.0030 mg	
100 mg	0.0029 mg	

Range	*Best Uncertainty (±)*[note 1]	*Remarks*
50 mg	0.0028 mg	
30 mg	0.0029 mg	
20 mg	0.0028 mg	
10 mg	0.0026 mg	
5 mg	0.0026 mg	
3 mg	0.0027 mg	
2 mg	0.0026 mg	
1 mg	0.0026 mg	

---

1. Represents an expanded uncertainty using a coverage factor, k=2.

NVLAP LAB CODE 200108-0

ALLIEDSIGNAL FM&T METROLOGY
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Accreditation Valid Through: December 31, 1999

DIMENSIONAL

NVLAP Code: 20/D01
Angle Blocks

Range	*Best Uncertainty (±)*$^{note\ 1}$	*Remarks*
up to 45 °	1.1 arc seconds	Comparison Method

Autocollimators

0 to 600 arc seconds	(0.3 arc seconds + 0.25% of angle)	Small Angle Generator

Index Table/Polygons

0 to 360 ° (in 10 ° or 30 ° increments)	0.6 arc seconds	3 Stack Method

Optical Comparators

Length up to 12 in	(0.0002 + 30L) in$^{note\ 2}$	Magnifications Standard
Angle 0 to 360 °	0.1 °	Angle Blocks

NVLAP Code: 20/D03
Gage Blocks

Range	*Best Uncertainty (±)*$^{note\ 1,\ 4}$	*Remarks*
up to 4 in	(3.2 + .88L) μin$^{note\ 2}$	Comparison
>4 in to 20 in	(5.8 + .53L) μin$^{note\ 2}$	Comparison
up to 100 mm	(0.081 + .88L) μm$^{note\ 3}$	Comparison
>100 mm to 500 mm	(0.161 + .41L) μm$^{note\ 3}$	Comparison

NVLAP Code: 20/D04
Laser Frequency/Wavelength

Laser Type	*Best Uncertainty (±)*	*Remarks*
HeNe	0.05 ppm	Comparison

NVLAP Code: 20/D05
Length

Stage Micrometers (Chrome on Glass)

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
0 to 2 in	18 μin	Laser Interferometer with Laser Edge Detection

Undirectional Step Gages

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
0 to 24 in	(20 μin + 1.8L)$^{note\ 2}$	CMM with Bi-swing Probe

Inspection Masters

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
0 to 2 in	Length 18 μin	Laser Interferometer with Laser Edge Detection
>2 to 12 in	Length 32 μin	Laser Interferometer with Laser Edge Detection
	Perpendicularity 8 ppm	CMM with Video Probe

Magnification Scales

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
up to 24 in	0.0003 in	CMM with Video Probe

Micrometer Masters

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
0 to 3 in	60 μin	Single - Axis Measuring Machine

Precision Micrometer Heads

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
0 to 2 in (0 to 50 mm)	35 μin	Laser Interferometer

1-D Ball Plates

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
up to 48 in	(30 μin + 2L) $^{note\ 2}$	CMM Single - Axis Method

Squares

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
up to 24 in by 36 in	30 μin	CMM, Self Closing Method

Straight Edges

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
up to 48 in	5 μin	CMM, Reversal Method

Dial Calipers

Range	*Best Uncertainty* (±)$^{note\ 1}$	*Remarks*
≤12 in	0.002 in	Gage Blocks

NVLAP Code: 20/D07
Thread Measuring Wires

Range	*Best Uncertainty (±)*$^{note\ 1}$	*Remarks*
All 29 ° and 60 ° Wires	8.0 μin	Direct Measurement

NVLAP Code: 20/D08
Optical Reference Planes
Optical Flats, Mirrors

Range	*Best Uncertainty (±)*$^{note\ 1}$	*Remarks*
0 to 12 in	1.2 μin	3 Flat Method
0 to 12 in	2.0 μin	Interferometer Method
0 to 12 in	4.0 μin	Comparison to Master

NVLAP Code: 20/D09
Roundness

Range	*Best Uncertainty (±)*$^{note\ 1}$	*Remarks*
up to 18 in Diameter	3 μin	Roundness Machine

NVLAP Code: 20/D11
Spherical Diameter
Master Balls

Range	*Best Uncertainty (±)*$^{note\ 1}$	*Remarks*
1/16 to 1.0 in (1 to 25 mm)	9 μin	Comparison to Master
Calibration Spheres		
to 1 in (25 mm)	11 μin Diameter	Comparison to Master
	5 μin Sphericity	Roundness
OD Micrometers		
up to 3 in	(0.0002 + L/50000) in$^{note\ 2}$	Micrometer Master

NVLAP Code: 20/D12
Surface Plates

Range	*Best Uncertainty (±)*$^{note\ 1}$	*Remarks*
Up to 8 ft Diagonal	(30 μin + 2 μin/ft^2)	Moody and Least Squares Method with Autocollimator

NVLAP Code: 20/D14

Plug Gages

Range	*Best Uncertainty* (±)*note 1*	*Remarks*
0 to 1 in	6.5 μin	Comparison to Master

Threaded Plug Gages - Pitch and Major Diameter per ANSI B1.2, ANSI B1.16M or ANSI B1.5

up to 10 in	P.D. 0.0001 in M.D. 0.000035 in	3 - Wire P.D. Measurement

Adj. - Thread Ring Gages - Functional Threads per ANSI/ASME B1.2 (UN or UNR Thread Form), ANSI/ASME B1.15 (UNJ Threads)

up to 10 in	P.D. 0.0002 in M.D. 0.0001 in	Set to 'W' Thread Set Master

Thread Set Plugs - Pitch and Major Diameter per ANSI B1.2, ANSI B1.16M or ANSI B1.5

up to 10 in	P.D. 0.000035 in M.D. 0.000020 in	3 - Wire P.D. Measurement

NVLAP Code: 20/D15
2-D Ball Plates

Range	*Best Uncertainty* (±)*note 1*	*Remarks*
36 in x 36 in	(30 μin + 2.5L)*note 2*	CMM Single - Axial Method

NVLAP Code: 20/D16
Coordinate Measuring Machines

Range	*Best Uncertainty* (±)*note 1*	*Remarks*
To 120 x 120 x 120 in	Axial (10 + 1.5L) μin Planar (35 + 8.5L) μin	Parametrical Calibration
To 24 in Volumetric	Axial (35 + 4L) μin	Step Gage
Diagonals	Planar (45 + 4L) μin	Step Gage
	Spatial (50 + 5L) μin	Step Gage
To 56" Volumetric	Axial (60 + 3L) μin	1-D Ball Plates
Diagonals	Spatial (70 + 3L) μin	1-D Ball Plates
To 36" Volumetric	Axial (50 + 5L) μin	2-D Ball Plates

Range	*Best Uncertainty (±)*[note 1]	*Remarks*
Diagonals	Planar (50 + 7L) μin	2-D Ball Plates
	Spatial (50 + 9L) μin	

MECHANICAL

NVLAP Code: 20/M06
Force

Range	*Best Uncertainty (±) in %*[note 1]	*Remarks*
5 thru 2400 lbf	0.01	of Applied Force
>2400 thru 100000 lbf	0.015	of Range
>100000 thru 300000 lbf	0.035	of Range

NVLAP Code: 20/M08
Mass

Range	*Best Uncertainty (±) in mg*[note 1]	*Method*
5 kg	19.70	Direct-Reading Weighing
3 kg	15.12	Direct-Reading Weighing
2 kg	12.08	Direct-Reading Weighing
1 kg	3.832	Direct-Reading Weighing
500 g	2.168	Direct-Reading Weighing
300 g	1.410	Direct-Reading Weighing
200 g	1.040	Direct-Reading Weighing
100 g	0.598	Direct-Reading Weighing
50 g	0.4480	Direct-Reading Weighing
30 g	0.4010	Direct-Reading Weighing
20 g	0.1528	Direct-Reading Weighing
10 g	0.1002	Direct-Reading Weighing
5 g	0.0780	Direct-Reading Weighing
3 g	0.0423	Direct-Reading Weighing
2 g	0.0266	Direct-Reading Weighing
1 g	0.0296	Direct-Reading Weighing
500 mg	0.0272	Direct-Reading Weighing
300 mg	0.0267	Direct-Reading Weighing
200 mg	0.0265	Direct-Reading Weighing
100 mg	0.0264	Direct-Reading Weighing
50 mg	0.0264	Direct-Reading Weighing

Range	*Best Uncertainty (±) in mg*$^{note\ 1}$	*Method*
30 mg	0.0264	Direct-Reading Weighing
20 mg	0.0045	Single Substitution Comparison to Reference Weights
10 mg	0.0035	Single Substitution Comparison to Reference Weights
5 mg	0.0034	Single Substitution Comparison to Reference Weights
3 mg	0.0036	Single Substitution Comparison to Reference Weights
2 mg	0.0034	Single Substitution Comparison to Reference Weights
1 mg	0.0034	Single Substitution Comparison to Reference Weights
10 lb	19.09	Direct-Reading Weighing
8 lb	15.90	Direct-Reading Weighing
5 lb	12.43	Direct-Reading Weighing
4 lb	10.80	Direct-Reading Weighing
3 lb	10.11	Direct-Reading Weighing
2 lb	3.723	Direct-Reading Weighing
1 lb	1.899	Direct-Reading Weighing
0.5 lb	1.150	Direct-Reading Weighing
0.3 lb	0.821	Direct-Reading Weighing
0.2 lb	0.575	Direct-Reading Weighing
0.1 lb	0.460	Direct-Reading Weighing
0.05 lb	0.417	Direct-Reading Weighing
0.03 lb	0.1277	Direct-Reading Weighing
0.02 lb	0.1064	Direct-Reading Weighing
0.01 lb	0.0998	Direct-Reading Weighing
0.005 lb	0.0518	Direct-Reading Weighing
0.003 lb	0.0458	Direct-Reading Weighing
0.002 lb	0.0290	Direct-Reading Weighing
0.001 lb	0.0356	Direct-Reading Weighing
10 oz	1.253	Direct-Reading Weighing
8 oz	1.150	Direct-Reading Weighing
6 oz	0.868	Direct-Reading Weighing
5 oz	0.865	Direct-Reading Weighing

Range	*Best Uncertainty (±) in mg*[note 1]	*Method*
4 oz	0.815	Direct-Reading Weighing
3 oz	0.551	Direct-Reading Weighing
2 oz	0.4850	Direct-Reading Weighing
1 oz	0.4250	Direct-Reading Weighing
1/2 oz	0.1373	Direct-Reading Weighing
1/4 oz	0.0985	Direct-Reading Weighing
1/8 oz	0.0968	Direct-Reading Weighing
1/16 oz	0.0482	Direct-Reading Weighing
1/32 oz	0.0370	Direct-Reading Weighing
1/64 oz	0.0356	Direct-Reading Weighing

NVLAP Code: 20/M11
Vibration/Acceleration

Range	*Best Uncertainty (±) in %*[note 1]
0.3 g @ 10 thru 40 Hz	2.5
1 g @ 10 thru 100 Hz	2.5
2 g @ 10 thru 100 Hz	2.5
5 g @ 100 Hz	2.5
10 g @ 30 thru <100 Hz	2.5
10 g @ 100 thru 2000 Hz	1.8
10 g @ > 2000 thru 10000 Hz	2.5
Shock	
10 thru 10000 g @ 10 thru 10000 Hz	3.5

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1. Represents an expanded uncertainty using a coverage factor, k=2.
2. L is in inches.
3. L is in meters
4. Best uncertainty is for steel blades.

NVLAP LAB CODE 200115-0

LOCKHEED MARTIN IDAHO TECH. CO., STANDARDS AND CALIBRATION LAB.
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Accreditation Valid Through: December 31, 1999

DIMENSIONAL

NVLAP Code: 20/D03
Gage Blocks

Range	*Best Uncertainty (±)^note 1^*
0-4"	3.4 - 4.5 μin
5-8"	4.5 - 5.9 μin
10-12"	6.9 - 7.8 μin
16"	9.8 μin
20"	11.8 μin

ELECTROMAGNETICS -DC/LOW FREQUENCY

NVLAP Code: 20/E05
Resistance

Range	*Best Uncertainty (±)^note 1^*
0.1 ohm	0.35 ppm
1.0 ohm	0.3 ppm
10.0 ohm	0.35 ppm
100 ohm	0.5 ppm
1K ohm	0.6 ppm
10K ohm	0.5 ppm
100K ohm	1.0 ppm
1M ohm	5.0 ppm

NVLAP Code: 20/E06
DC Voltage

Range	*Best Uncertainty (±)^note 1^*
10 volt Zener Reference	0.3 ppm

TIME AND FREQUENCY

NVLAP Code: 20/F01
Frequency Dissemination

Range	*Best Uncertainty (±)*[note 1]	*Remarks*
0.1 MHz, 1 MHz, 5 MHz, 10 MHz	1 x 10^{-11}/24 hours	NIST FMS System

NVLAP Code: 20/F03
Oscillator Characterization (Electronic Counters)

Range	*Best Uncertainty (±)*[note 1]	*Remarks*
0.1 MHz, 1 MHz, 5 MHz, 10 MHz	5 x 10^{-10}/24 hours	NIST FMS System

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1. Represents an expanded uncertainty using a coverage factor, k=2.

NVLAP LAB CODE 200123-0

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Accreditation Valid Through: December 31, 1999

ELECTROMAGNETIC - RF/MICROWAVE

NVLAP Code: 20/R08
Microwave Antenna Parameters

Range	*Best Uncertainty in dB (±)*[note 1]	*Remarks*
Early Designed Biconical Antennas (such as the EMCO 3104)		
30-60 MHz	1.7	
60-300 MHz	1.0	
New Designed Biconical Antennas (such as the EMCO 3110)		
30-90 MHz	1.2	
90-300 MHz	0.9	
Log-Periodic Antennas (such as the EMCO 3146)		
200-1000 MHz	1.0	Vertical
200-1000 MHz	1.1	Horizontal
200-1000 MHz	1.0 to 2.2	Fixed Heights
BiLog Antennas (such as the Chase CBL6111)		
20-1000 MHz	0.9	
Dipole Antennas (such as the EMCO 3121)		
30-1000 MHz	0.6	
DRWG Horn Antennas (such as the EMCO 3115)		
1-18 GHz	1.1	3 Ant. Method, OATS
1-18 GHz	1.2	Standard Field, OATS

Range	*Best Uncertainty in dB (±)$^{note\ 1}$*	*Remarks*
Horn Antennas (above 18 GHz)		
18-40 GHz	1.2	Standard Field, Anechoic
LISN's		
10 kHz to 100 MHz	0.4	Insertion Loss
10 kHz to 100 MHz	0.4	Impedance
Current Probes/Injection Probes		
5 Hz - 500 MHz	0.3	Insertion Loss
Absorbing Clamps		
30 to 1000 MHz	2.3	
CDN'S & 150-50 Ohm Adapters		
10 kHz to 230 MHz	0.4	Impedance & Insertion Loss
Isotropic Probes		
10 kHz-1 GHz	2.4	GTEM, Boonton MV
100 MHz - 18 GHz	2.4	GTEM, PWR Sensors
10 kHz - 1 GHz	1.3	Stripline
18-40 GHz	1.9	Standard Field
RF Pre-amps & Amps		
10 kHz to 18 GHz	0.4	GAIN Cal
Loop Antennas		
1kHz - 30 MHz	1.1	Vacuo Junction
20 Hz - 1 kHz	1.1	Series Resistor
Rod Antennas		
100 Hz to 30 MHz	0.5	Using ECSM (Insertion Loss with Mfr's Fixture)
100 Hz to 10 kHz	1.0	Using NIST 1347
10 kHz to 30 MHz	0.9	Using NIST 1347

Range	*Best Uncertainty in dB (±)*[note 1]	*Remarks*
RF Insertion Loss		
10 kHz to 18 GHz	0.4	
ESD Simulators/Surge Generators		
0 to 15 kV ESD Gun	0.3 dB	
0 to 6 kV Surge	0.3 dB	

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1. Represents an expanded uncertainty using a coverage factor, k=2.

NVLAP LAB CODE 200154-0

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Accreditation Valid Through: March 31, 1999

DC/LOW FREQUENCY

NVLAP Code: 20/E17
Pulse Waveform

Parameter	*Range*	*Best Uncertainty (±)note 1*	*Remarks*
Risetime (Generate)	<20 ps	14.43%	
Risetime (Measure)	<1 ns to 100 ps	5.78%	Single Shot
Impulse Spectral Amplitude			
Impulse Noise (Source)	10 kHz to 150 kHz	14.21%	Band A
Impulse Noise (Source)	150 kHz to 30 MHz	14.21%	Band B
Impulse Noise (Source)	30 MHz to 1 GHz	23.43%	Band C & D
HV (Measure)	1 kV to 60 kV	0.13%	with HVD
	1 kV to 40 kV	2.33%	with HV Probe

TIME AND FREQUENCY

NVLAP Code: 20/F03
Oscillator Characterization

Parameter	*Nominal*	*Best Uncertainty (±)note 1*	*Remarks*
Frequency/Period			
Frequency (Source)	10 MHz	2.82×10^{-9}	
Frequency (Measure)	10 MHz, 1 Vrms	1.34×10^{-7}	
Frequency (Comparison)	10 MHz, 1 Vrms	1.34×10^{-9}	1 second
Duty Cycle/Duration			
@ 1 s Time Interval	10 MHz, 1 Vrms	0.61%	
@ 100 mV p-p	2 GHz	6.24%	

Jitter			
@200 mV p-p	2 GHz	1.38%	
@ 1Vrms	10 MHz	1.71%	
Drift			
@ 100 s Time Interval	10 MHz	5.7 x 10^{-9}	
Spectral Purity			
Single Sideband Phase Noise (SSB)			
@ +30 to -20 dBm	10 MHz to 1300 MHz	15.10%	with receiver
@ 0 ≥ -22 dBm	1 GHz	15.10%	with spectrum analyzer
Harmonic Distortion			
@ 0 dBm	0.2 Hz to 100 Hz	5.44%	
@ 0 dBm	1 GHz	15.10%	
@ -22 dBm	10 Hz to 100 kHz	29.91%	
2nd Order Harmonic/Intermodulation Distortion			
@ 0 dBm	0.24 Hz to 100 Hz	5.44%	
@ 0 dBm	1 GHz	15.10%	
AM Modulation			
AM (Source)	50 Hz to 50 kHz Rates	0.18%	
AM (Measure)	50 Hz to 50 kHz Rates	1.41%	
AM (Source)	33.33% of depth	0.12%	
FM Modulation			
FM (Source)	DC to 100 kHz Rates	0.16%	
FM (Measure)	50 Hz to 100 kHz Rates	1.72%	
FM (Source)	34 kHz Peak Deviation	0.12%	
PM Modulation			
PM (Measure)	150 kHz to 1300 MHz	4.77%	

Spurious Content			
@ 0 dBm	0.2 Hz to 100 Hz	5.44%	
@ 0 dBm	1 GHz	15.10%	

RF/MICROWAVE
NVLAP Code: 20/R13
Attenuators

Relative RF Power (Attenuation-Measure)

Frequency	*Nominal*	*Best Uncertainty (±)*[note 1,2]	*Remarks*
100 kHz to 2.6 GHz	0 dB to - 20 dB	M + 0.02 dB	
100 kHz to 2.6 GHz	-20 dB to -40 dB	M + 0.03 dB	
100 kHz to 2.6 GHz	-40 dB to -60 dB	M + 0.04 dB	
100 kHz to 2.6 GHz	-60 dB to -80 dB	M + 0.05 dB	
100 kHz to 2.6 GHz	-80 dB to -100 dB	M + 0.06 dB	
100 kHz to 2.6 GHz	-100 dB to -110 dB	M + 0.12 dB	
100 kHz to 2.6 GHz	-110 dB to -120 dB	M + 0.17 dB	
2.5 GHz to 26.5 GHz	-0 dB to -10 dB	M + 0.22 dB	
2.5 GHz to 26.5 GHz	-10 dB to -20 dB	M + 0.09 dB	
2.5 GHz to 26.5 GHz	-20 dB to -30 dB	M + 0.10 dB	
2.5 GHz to 26.5 GHz	-30 dB to -40 dB	M + 0.13 dB	
2.5 GHz to 26.5 GHz	-40 dB to -50 dB	M + 0.14 dB	
2.5 GHz to 26.5 GHz	-50 dB to -60 dB	M + 0.16 dB	
2.5 GHz to 26.5 GHz	-60 dB to -70 dB	M + 0.18 dB	
2.5 GHz to 26.5 GHz	-70 dB to -80 dB	M + 0.20 dB	
2.5 GHz to 26.5 GHz	-80 dB to -90 dB	M + 0.31 dB	
2.5 GHz to 26.5 GHz	-90 dB to -100 dB	M + 0.32 dB	
2.5 GHz to 26.5 GHz	-100 dB to -110 dB	M + 0.34 dB	
2.5 GHz to 26.5 GHz	-110 dB to -120 dB	M + 0.36 dB	
30 MHz	0 dB to 50 dB	M + 0.07 dB	
Attenuation High Power (Generate)			
DC to 2 GHz	20 dB	M + 0.44 dB	with Narda 766-20 ATTN.
DC to 2 GHz	20 dB	M + 0.80 dB	with Narda 769-20 ATTN.

Frequency	*Nominal*	*Best Uncertainty* $(\pm)^{\text{note } 1,2}$	*Remarks*
Attenuation High Voltage (Generate)			
DC to 1 GHz	20 dB	M + 0.30 dB	
DC to 2 GHz	20 dB	M + 0.64 dB	
Impedance (Source)			
DC to 18 GHz	50 ohms	1.84%	
DC to 6 GHz	50 ohms	0.61%	
DC to 3 GHz	75 ohms	0.76%	
Impedance (Measure)			
300 kHz to 1 MHz	50 ohms	12.71%	
1 MHz to 100 MHz	50 ohms	8.19%	
100 MHz to 150 MHz	50 ohms	12.71%	
100 Hz, 1 kHz, 10 kHz, 100 kHz	50 ohms	1.97%	with LCR Meter
DC to 6 GHz	50 ohms	11.79%	(TDR)
Electrical Length (TDR Measure)			
1 GHz	30 cm	7.57%	

Return Loss

Frequency	*Directivity*	*Test Port Match*	*Best Uncertainty* $(\pm)^{\text{note } 1,3}$
0.01 GHz to 8.4 GHz	≥36 dB	≥23 dB	0.16 ± 0.071 p^2
8.4 GHz to 12.4 GHz	≥36 dB	≥19 dB	0.16 ± 0.112 p^2
12.4 GHz to 18 GHz	≥34 dB	≥15 dB	0.02 ± 0.178 p^2

Insertion Loss

Frequency	*Nominal*	*Best Uncertainty* $(\pm)^{\text{note } 1}$	*Remarks*
300 kHz to 1 MHz	>60 dB Dynamic Range	13.37%	
1 MHz to 100 MHz	>60 dB Dynamic Range	9.18%	

Frequency	*Nominal*	*Best Uncertainty (±)$^{note\ 1}$*	*Remarks*
100 MHz to 300 MHz	>60 dB Dynamic Range	13.37%	
300 MHz to 1.5 GHz	>60 dB Dynamic Range	18.64%	
1.5 GHz to 2 GHz	>60 dB Dynamic Range	33.93%	
Phase (Measure)			
300 kHz to 1 MHz	0 to 360 degrees	2.57%	
1 MHz to 100 MHz	0 to 360 degrees	0.66%	
100 MHz to 300 MHz	0 to 360 degrees	2.57%	
300 MHz to 1.5 GHz	0 to 360 degrees	3.85%	
1.5 GHz to 2 GHz	0 to 360 degrees	7.70%	
0.01 Hz to 160 MHz	-180 to 360 degrees	2.96%	with Series Counters

NVLAP Code: 20/R17
Power Meters

RF Power Absolute

Frequency	*Nominal*	*Best Uncertainty (±)$^{note\ 1,2}$*	*Remarks*
100 kHz to 18 GHz	+20 dBm to -30 dBm	M + 0.55 dB	
100 kHz to 18 GHz	+30 dBm to -20 dBm	M + 0.25 dB	
50 MHz to 26.5 Hz	+30 dBm to -20 dBm	M + 0.57 dB	
10 kHz to 100 MHz	0.5 mV	M + 0.20 dB	
100 MHz to 300 MHz	0.5 mV	M + 0.24 dB	
300 MHz to 1 GHz	0.5 mV	M + 0.28 dB	
1 GHz to 1.2 GHz	0.5 mV	M + 0.43 dB	
10 kHz to 100 MHz	1.0 mV	M + 0.14 dB	
100 MHz to 1 GHz	1.0 mV	M + 0.20 dB	
300 MHz to 1 GHz	1.0 mV	M + 0.24 dB	
1 GHz to 1.2 GHz	1.0 mV	M + 0.42 dB	
10 kHz to 100 MHz	1.0 mV	M + 0.11 dB	
100 MHz to 300 MHz	10 mV to 1000 mV	M + 0.11 dB	
300 MHz to 1 GHz	10 mV to 1000 mV	M + 0.22 dB	
1 GHz to 1.2 GHz	10 mV to 1000 mV	M + 0.41 dB	

Frequency	*Nominal*	*Best Uncertainty (±)*$^{note\ 1,2}$	*Remarks*
Tuned RF Power - Absolute			
100 kHz to 2.6 GHz	0 dBm to -100 dBm	M + 0.28 dB	
100 kHz to 2.6 GHz	-100 dBm to -110 dBm	M + 0.30 dB	
100 kHz to 2.6 GHz	-110 dBm to -120 dBm	M + 0.32 dB	
2.5 GHz to 26.5 GHz	0 dBm to -10 dBm	M + 0.64 dB	
2.5 GHz to 26.5 GHz	-10 dBm to -40 dBm	M + 0.61 dB	
2.5 GHz to 26.5 GHz	-40 dBm to -60 dBm	M + 0.62 dB	
2.5 GHz to 26.5 GHz	-60 dBm to -80 dBm	M + 0.63 dB	
2.5 GHz to 26.5 GHz	-80 dBm to -90 dBm	M + 0.67 dB	
2.5 GHz to 26.5 GHz	-90 dBm to -110 dBm	M + 0.68 dB	
2.5 GHz to 26.5 GHz	-110 dBm to 120 dBm	M + 0.69 dB	

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1. Represents an expanded uncertainty using a coverage factor, k=2.
2. M = Mismatch uncertainty
3. Derived Return Loss uncertainty statements in 'p' (Reflective Coefficient).

NVLAP LAB CODE 200211-0

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Accreditation Valid Through: December 31, 1999

OPTICAL RADIATION

NVLAP Code: 20/O01
Laser Power Energy

Range	*Wavelength*	*Best Uncertainty (±) in %*[notes 1 & 2]
Optical Fiber Power Meters in A/W		
10^{-11} A to 10^{-3} A, 1 pW to 2 mW	800 to 1700 nm	2.31 to 3.15

NVLAP Code: 20/O03
Radiometric

Range	*Wavelength*	*Best Uncertainty (±) in %*[notes 1 & 2]
Photodiode Spectral Response in A/W		
10^{-11} A to 10^{-3} A, 1 pW to 2 mW	400 to 1700 nm	1.42 to 3.15

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1. Represents an expanded uncertainty using a coverage factor, k=2.
2. Uncertainty varies with wavelength.

NVLAP LAB CODE 200235-0

STERIS-ISOMEDIX SERVICES
11 Apollo Drive
Whippany, NJ 07981
Contact: Mr. Glenn W. Calvert
Phone: 973-887-4700 Fax: 973-887-1476
E-Mail: isomedix@nac.net

Accreditation Valid Through: December 31, 1999

IONIZING RADIATION

NVLAP Code: 20/I02
High Dose Dosimetry

Source	*Range*	*Best Uncertainty(±)*[note 1]
^{60}Co Gamma Rays	100 grays or more at a rate of approximately 1 to 20 kgy/hour	2.5%

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1. Represents an expanded uncertainty using a coverage factor, k=2.

NVLAP LAB CODE 200262-0

METROPLEX METROLOGY LAB, INC.
2309 E. Loop 820 North
Fort Worth, TX 76118-7103
Contact: Mr. James L. Johnson
Phone: 817-589-8300 Fax: 817-589-8311

Accreditation Valid Through: March 31, 1999

DIMENSIONAL

NVLAP Code: 20/D03
Gage Blocks

	Range	*Best Uncertainty* (±)[note 1]	*Remarks*
	0 to 1 in	2.5 μin	
	>1 in to 4 in	2.5 μin + 0.5 μin/in	

NVLAP Code: 20/D14
Threaded Plug and Ring Gages

Plug Gages	0 to 6 in	70.3 μin	Major Diameter
Ring Gages	0 to 6 in	196.1 μin	Major Diameter

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1. Represents an expanded uncertainty using a coverage factor, k=2.

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